

COMMERCIAL CAR JOURNAL

THE MAGAZINE FOR TRUCK AND BUS FLEET OPERATORS

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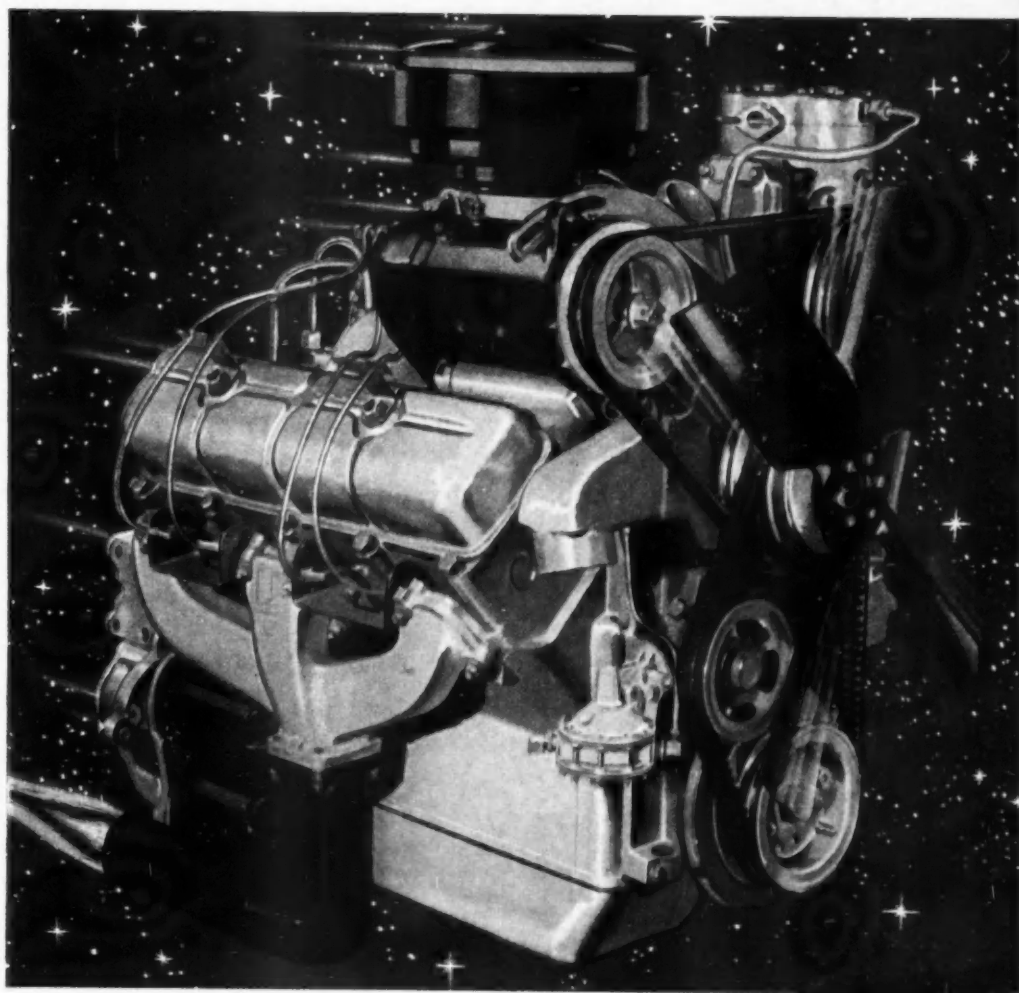
WARRANTY

**now on all
REO**

**GOLD COMET
ENGINES**

*including new Reo
220 h.p. V-8
... for its size
and weight the
most powerful V-8
engine ever built
for trucks*

Reo Motors, Inc.
Lansing 20, Mich.
Toronto, Ontario



**WHEN YOU BUY REO POWER, YOU BUY
INSURED ENGINE PERFORMANCE**

See 2-page Reo ad inside for full details

REO MOTORS, INC.

SUBSIDIARY OF **BOHN** ALUMINUM AND BRASS CORPORATION

"WATCH REO ROLL"

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May, 1955

New DODGE POWER-DOME V-8 truck engines lead their field with 193-202 hp....offer larger valves, higher compression, short stroke!



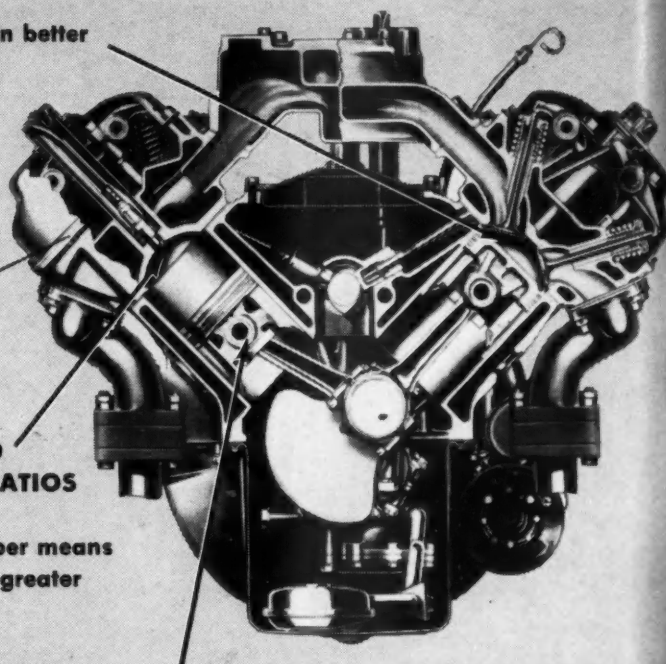
NEW LARGER INTAKE VALVES result in better engine breathing, improved efficiency.



INCREASED COMPRESSION RATIOS in hemispherical combustion chamber means better use of fuel, greater economy.



MODERN SHORT-STROKE DESIGN cuts friction to a minimum, reduces engine wear and tear.



More and more fleet owners are making the change-over to all-new Dodge Power-Dome V-8 trucks! And here's why:

In the 2 $\frac{3}{4}$ -, 3-, and 3 $\frac{1}{2}$ -ton field, Dodge Power-Dome V-8's are the most powerful truck engines offered by any popular make (see chart below)! New bigger valve heads assure a more free flow of fuel-air mixture and greater power. New stepped-up 7.2 to 1 compression ratio gets more heat energy from fuel, saves on gas!

MAXIMUM GROSS HORSEPOWER

MAX. G.V.W.	DODGE	TRUCK "F"	TRUCK "G"	TRUCK "I"
21,000 lbs.	193-hp.	152-hp.	155-hp.	145-hp.*
24,000 lbs.	193-hp.	170-hp.	175-hp.	175-hp.*
27,000 lbs.	202-hp.	170-hp.	170-hp.*	182-hp.*

*6-cylinder

Furthermore, "oversquare" short-stroke design (bore larger than stroke) means less friction, far longer life! And remember . . . Dodge trucks are built to last longer . . . now priced to sell with the lowest! Ask your nearby Dodge truck dealer for a prove-it-yourself demonstration soon.

DODGE "Job-Rated" TRUCKS

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Sunkist Pie Company



What Changed Their Minds?

How the Success of Olson Bodies Converted Steel Body Builders

In its May 1953 issue, Commercial Car Journal published the arguments of steel body advocates against the use of aluminum delivery bodies.

Today, leading steel body proponents are offering aluminum bodies and others are preparing to do so.

What changed their minds?

Olson Bodies by Grumman did! They proved that *aero-type* Aluminum Alloy construction provides more loadspace with less deadweight, dents less, corrodes less, costs less for gasoline, tires, brakes, clutches, springs, bearings, king pins, spindles and is easier on the power plant and cooling system. That's how Olson Bodies *pay for themselves thru Savings!*

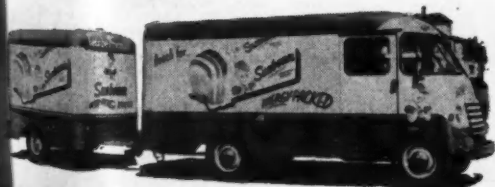
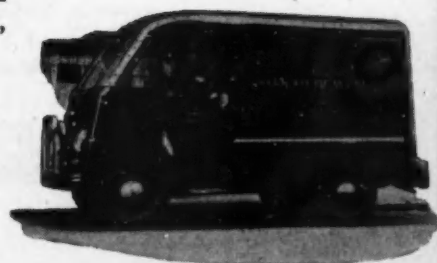
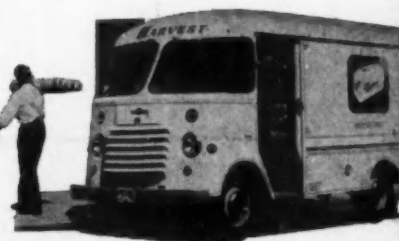
But the compelling reason for the conversion of steel body builders is that Olson Aluminum Alloy Bodies by Grumman have been chosen by the shrewdest fleet operators of America to *replace the steel bodies they formerly used.*

We welcome good, honest competition and submit that your best investment still is the Bodies by Grumman that revolutionized route delivery economics.

Only Aluminum Alloy Bodies by Grumman bring to you the "know-how" of 25 years' experience in strength-with-light-weight aluminum fighter planes and 23 years' experience in aluminum body construction.

Economy in delivery requires these long-lasting bodies that are cheaper to *operate and maintain*, depreciate *less*, last *longer* and bring the *highest resale prices* on the used truck market.

Olson Bodies are in demand and worth insisting upon. If your truck dealer—Chevrolet, Ford or GMC—doesn't stock Olson Bodies, we will send him and you our new catalogue, including "Today's Economics of Route Deliveries" — *free on request* to J. B. E. Olson Corp., 1740 Broadway, New York 19, N. Y.



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Here are five special equipment problems faced by Florida Power & Light's Henry Allen and how he solved them.

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It gives fleetmen new perspective, helps them find solutions to safety, maintenance, other management problems.

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NAMBO for intercity and ATA for local transit; here is how the bus associations serve the nation's bus fleets.

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June, 1955

COMMERCIAL CAR JOURNAL, June, 1955

THERE'S NO SUCH THING AS NORMAL CONDITIONS IN THE FLEET BUSINESS

FIFTY MILES to the nearest garage!
An ignition failure on this Colorado
run could ruin a schedule. Reason



enough for using
BLUE STREAK heavy
duty points. These
high - amperage
tungsten points
have a 55.4% larger
surface which re-
duces arc-at-break
heat and cuts pitting and burning to
a minimum. Add bakelite impreg-
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PIONEER IN HEAVY DUTY IGNITION

MONEY-MAKING FORMULA

ALL FLEET OPERATORS SHOULD KNOW-



Goodyear Battery Maintenance Plan

+

2-min. a week follow-up

=

- * Longer Battery Life
- * Longer Electrical System Service
- * Fewer Road Delays

THE Goodyear Battery Maintenance Plan strikes at the heart of battery failure—improper voltage regulation—the only way it can be done.

At each watering, batteries are load-tested with the Goodyear All-Purpose Tester for state of charge and the findings are recorded on a Fleet Battery Record Card—one for each battery. When the findings go above or below the stripe on the Record Card, your maintenance

man knows voltage is too high or low. With a prompt adjustment of the trouble, you get the 3-way savings shown above.

And your savings grow even larger when you use this easy-to-follow program with Goodyear Heavy-Duty Truck and Bus or Diesel-type batteries. Mail in the coupon below and get the full story today.

Goodyear, Battery Department, Akron 16, Ohio

GOOD YEAR

THE GREATEST NAME IN RUBBER

SEND FOR FREE BOOKLET TODAY!

THE GOODYEAR TIRE & RUBBER COMPANY, INC.
Dept. F-7912, Akron 16, Ohio

Please send me a copy of the Goodyear Fleet Battery Maintenance Manual.

Name.....

Firm.....

Street.....

City.....Zone.....State.....

Number of Trucks in Fleet.....

The OVERLOAD

E D I T O R I A L C O M M E N T

He's Been Working on the Railroad

DURING recent months we've been tangled up with some important but rather involved subjects on this page. As a complete switch in pace we'd like to devote this issue to a railroader. For more than 30 years he's been a machinist in one of the nation's largest railroad shops. In his own words he tells how he has changed his philosophy on the "competitive outlook." Obviously we can't reveal his identity but it makes good reading for anyone in the trucking business:

"Often we railroad employees have been asked to vote for political candidates who had expressed themselves in favor of a 'more equal distribution' of taxes between the railroads and highway users. Also we've signed petitions to that effect after men were already in office. Yet not one in a hundred of us knew anything about the tax ratios. We were simply signing petitions to keep our own jobs going. Or so we thought. But were we?"

"It is estimated that the trucking industry is responsible for one out of every seven jobs in America. More than 9 million people are employed by it. Industry created by trucks and buses has assumed tremendous proportions. No one denies that this has caused inroads in railroad transportation. So we are asked to curb these inroads by our votes and influence.

"But my next door neighbor owns a \$12,000 tractor-trailer. It took many men many days to make it. It will take many more men to service it and supply it with fuel and oil. The owner trades in local stores, supports our local church and club, pays rent to a railroad man. He has hauled tons of fruit to stores in northern cities to help keep the food store clerks behind the counters and wholesalers and retailers in business. He has just finished paying for his rig and now will use

some of his proceeds to buy a house of his own. With what he has left he will educate his son for the challenges of life.

"There are hundreds of thousands of men like this in America. Yet I have been asked to vote and petition him out of a job by an industry that has enjoyed and is enjoying one of its greatest periods of profit!

"But the trucks are ruining our roads, say my industry chiefs. Maybe they are. But is that sufficient reason to have my neighbor walking the streets? We are gradually approaching a period of roadbuilding equal to the assault of transportation vehicles themselves. Nearby a marvelous north-south highway is in the making. It will be open to trucks which will use it for speed and convenience.

"We'd better find a way to strengthen our mechanical weakness rather than try to weaken our mechanical strength!

"The matter of service is also to be considered. I'm old enough to remember when we had no truck or bus transportation. We got aboard trains *if there was room*. If not, we waited for the next one, hopefully. If the oldtime conductor didn't insult you before you reached destination, he felt that his day was a failure. Our freight was shipped if and when the hard-boiled station agent got ready.

"It isn't that way anymore except in a very few instances where motor transportation is unavailable . . . or when a flood or some other emergency makes it necessary for people to ride trains. Then people find that the same people are still on board.

"It was during such a time of trouble that I vowed never to sign another petition for a 'more equitable distribution of taxes.' I have made it good. And I'm still working for the railroad."

Bart Rawson
Editor



A COMPLETE HOME MAKES A HEAVY HAUL—so engines, chassis and gears of National Homes' trailer trucks are Texaco-lubricated



A COMPLETE HOME every 12 minutes! National Homes Corporation, with plants at Lafayette, Indiana, and Horseheads, New York, produces over 47% of all new prefabricated houses built in the U. S., sells through 551 dealers in 41 states and the District of Columbia. Deliveries to building sites within 500 miles of the plants are made by a fleet of 240 trailer trucks. To protect this fleet and assure its dependable operation, National Homes relies on Texaco lubrication.

TUNE IN...TEXACO
STAR THEATER
starring JIMMY DURANTE
or DONALD O'CONNOR,
on television...
Saturday nights, NBC.



TEXACO

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At Your Service

TIMELY NOTES ON MAINTENANCE AND OPERATION

by MURRAY SIMKINS Managing Editor

Simplified Fuel System for P&H Diesels

NEW FUEL system designed around the Roosa-Master pump is now standard equipment on all diesel engines being produced by Harnischfeger Corp. The new fuel system does away with a total of 131 separate parts and is 49.5 lb lighter in weight. It is far easier to understand, and requires greatly less maintenance than the former system. Another feature of the new fuel system is easier starting with injection automatically retarded until engine speed reaches 500 rpm. Injection is then gradually advanced, matching the increased operating speeds. Engine torque characteristics are said to be further improved with the new pump which, in mobile equipment, result in better performance and greater responsiveness to operator's control.

Brake Adjustment—IHC CO-190—200

INTERNATIONAL Harvester Co., through its fleet service news letter has set up a streamlined check for the air brake system on the CO-190—200 series. Here it is for your perusal:

1. Jack up vehicle and adjust slack adjusters at each wheel to obtain minimum slack adjuster free travel; at the same time there is to be free wheel rotation without brake drag.

2. The air brake valve should require no adjustment since the valve is pre-set at the factory to obtain a line pressure of 5 to 10 lb with a 7/64-in. spacer gage located between the valve roller and valve cage. The adjustment is made by turning the stop screw at the rear of the valve lever. This adjustment assures full opening of the exhaust port in the valve upon treadle release. The adjustment also establishes the approximate one-inch treadle free travel which must be evident. Full open position (application) of the brake valve requires approximately 6 in. of treadle movement beyond the one-inch

free travel mentioned above. All measurements are made at the toe of the treadle.

3. Adjust the brake rod from the air valve to the frame relay lever so that all slack is removed and the clevis pin enters the lever at the air valve freely. Lock up the adjustment on the brake rod and see that all cotter pins are in place. Lubricate brake rod linkage at all points of friction.

4. Check brake treadle for one-inch free travel. The treadle should have an additional approximate six inches of travel to the stop located at the toe board panel. If 6 in. of movement is not available, the stop should be relocated or adjusted to obtain this travel. This adjustment provides the effective treadle movement to insure full opening of the brake valve.

Plymouth—Check Valve Noises

AHY-FIRE V8 engine noise that sounds like a faulty hydraulic tappet can be caused by a valve spring, striking the head at the edge of the valve recess as the valve spring is compressed. This condition is usually indicated by a shiny spot on the lower coil of the spring or on the edge of the recess.

Beveling or chamfering the edge of the recess will provide the necessary clearance for the spring.

12 Volt Battery Characteristics

WITH the great increase in the number of 12 volt batteries used in recent production, and the probability of more manufacturers adopting this system in the future, it might be well to call attention to certain characteristics of these systems which are important to service people.

1. Current leakage from the terminals to

(TURN TO NEXT PAGE, PLEASE)

Now EVERY Fleet in America can afford **Leece-Neville** Alternators



PACKAGE DELIVERY NEWSPAPER
LAUNDRY DRY CLEANING ETC



MILK TRUCKS BAKERY
TRUCKS ETC



CONSTRUCTION EQUIPMENT



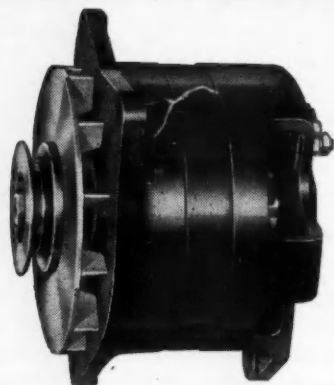
TAXI SUBURBAN POLICE
OTHER PASSENGER CARS



MOTOR FREIGHT



ALL UTILITY COMPANIES
TOWING PUMP GAS ETC



SENSATIONAL LOW PRICE ON NEW L-N ALTERNATOR SYSTEM

The new Leece-Neville Alternator brings to fleets of passenger cars, light and medium trucks all the famous advantages that larger L-N Alternators have proved by performance for over nine years: charging current with engine idling, high output, low maintenance cost. Plus new, simplified bracketing. Yet the new L-N Alternator System actually *costs less* than "extra" output d. c. generators.

L-N ALTERNATORS FOR EVERY APPLICATION

There's a right L-N Alternator for every fleet unit. Capacities range from 60 amps for 6-volt systems to 180 amps for 12 volt. L-N Alternators will keep your fleet on the job and out of the repair shop.

Why not get the whole story? Just write The Leece-Neville Company, Cleveland 14, Ohio. *Distributors in principal cities . . . service stations everywhere.*

ON YOUR NEW UNITS
SPECIFY LEECE-NEVILLE EQUIPMENT,
FACTORY-INSTALLED

YOU CAN
RELY ON

Leece-Neville

ALTERNATOR SYSTEMS • GENERATORS
CRANKING MOTORS • REGULATORS
SWITCHES • FRACTIONAL HP MOTORS



At Your Service

Continued from Page 9

ground will be much greater on a 12 volt battery than on a 6 volt battery, should spilled electrolyte bridge the battery top from terminal to ground, as the higher voltage pushes more current through the same leakage path.

Since high voltage causes more amperes to leak, all other things being equal, and lower ampere-hour rating of the battery makes fewer amperes available, it might be said that a given leakage path across the top of a 12 volt battery is four times as likely to run the battery down, as the same leak would be to discharge a 6 volt battery. Remedy: Thoroughly clean and dry the top of the battery, to end the leakage. Then find out why the battery is wet with electrolyte. Most common causes: (a) Overfilling the cells . . . Adjust to proper level. (b) Overcharging . . . Lower the voltage regulator setting as required. (c) Cracked case or leaky sealing compound . . . Reseal or replace battery. To minimize corrosion damage, the usual procedure of an ammonia or baking soda-water bath on all parts touched by acid, followed by vasoline on the battery and cable terminals is still sound practice, more important today than ever.

2. Another 12 volt characteristic which bears comparison to the more familiar 6 volt installation is this: Often in cold weather car owners crank till the battery is dead, still failing to get a start, whereupon they leave the car for other transportation. A good 6 volt battery will cease cranking while there is still enough "anti-freeze value" to the electrolyte to prevent freezing of the battery, but under similar conditions the higher voltage and lower amperage requirements of the 12 volt system result in nearly complete battery discharge before cranking ceases. This leaves the electrolyte so nearly pure water it will freeze at temperatures just under 32°F., probably destroying the battery by bursting the case.

3. Greater caution than ever must be taken to avoid shorting terminals, leads, etc. to ground in 12 volt systems. First, the lighter gauge wire used with 12 volts, having less capacity, is more easily burnt up. Secondly, (TURN TO PAGE 12, PLEASE)

Exclusive Goo
resists corro
keeps it



MORE TON

COMMERCIAL CAR

LITTLE THINGS MEAN A LOT—



Exclusive Goodyear Bond-a-Coat finish
resists corrosion and discoloration,
keeps its luster indefinitely.

in upping pay loads, too

MAYBE you've never thought of rims as a big item in your operation. Yet, you can achieve big savings if you pick the right rims.

Goodyear Wide Base Rims, for example, in nearly all sizes, weigh less than standard-size wide base rims. *When you specify these lighter rims, you can haul as much as a hundred pounds' extra pay load on a tractor-trailer unit.*

Greater Tire Mileage

In addition, Goodyear Wide Base Rims give up to 30% greater tire mileage—and the service records of countless trucks and buses prove it. That's because these superior rims help to reduce sidewall flexing—resulting in less tire heat, fewer tire failures and road delays.

Cost Less To Start With

And here's the real pay-off: *even their initial cost is lower!* Check the whole story on these important economies with your Goodyear Rim Supplier. Or write Goodyear, Metal Products Division, Akron 16, Ohio



GOODYEAR

WIDE BASE RIMS

MORE TONS ARE CARRIED ON GOODYEAR RIMS THAN ON ANY OTHER KIND

We think you'll like THE GOODYEAR TELEVISION PLAYHOUSE—every other Sunday—NBC TV Network


COMMERCIAL CAR JOURNAL, June, 1955





5 lbs.

65 Trucks spray-cleaned with only 5 lbs. of Oakite Detergent

Trucks were lined up bumper to bumper at one fleet's garage—65 of them altogether, many abreast and in many rows. Elbow room was at a premium. Yet washing them was a cinch—when “mechanized” Oakite cleaning techniques were used!

 First, a handy Oakite Foam-Spray Unit was mounted on a dolly and filled with a heated solution of Oakite Composition No. 70. Then, as one man applied thick deposits of detergent foam to the sides of each truck, a second man brushed the clinging lather lightly over each truck's surface. A third man completed the cleaning operation with a quick pressure rinse.

 Results? In one evening, all 65 trucks were cleaned sparkling bright and streak free! Moreover, the entire cleaning job required only five pounds of cleaning material!

 Amazing results like these are not at all unusual when truck-washing is “mechanized” the Oakite way. No other cleaning technique can give you such effective results so quickly and economically. Why not look into Oakite “mechanized” cleaning methods for *your* fleet? An attractive folder, prepared by Oakite, gives you complete details. Call your local Oakite Man today for your **FREE** copy—or write Oakite Products, Inc., 26D Rector Street, New York 6, N. Y.



Technical Service Representatives in Principal Cities of U. S. and Canada



At Your Service

Continued from Page 10

12 volts forces much more current through a “short” than 6 volts, often causing serious damage before the mechanic can remedy the trouble, be it a wrench dropped on a battery or whatever the cause may be.—By W. W. Squier, Vice-President, Sun Electric Corp.

Diesel Rebuilding Service

THE HANCOCK Diesel Service Co. at Findlay, Ohio, has established a mail order service for rebuilding worn injector equipment. As many bus operators know Hancock is equipped for mass production operation and has modern equipment for this type of work.

Equipment and tooling has been set up for the repair of GM unit injectors for the 71 series; plungers and bushings for GM injectors of all series; plungers and bushings for American Bosch and International pumps; and Cummins injectors.

Cathode Ray Engine Analyzer

AN ELECTRONIC instrument for quick and accurate diagnosis of automotive engine ills has been developed in the research laboratories of Socony-Vacuum Oil Co., Inc., and will be manufactured and sold by the Allen B. Du Mont Laboratories, Inc., Clifton, N. J.

Weighing less than 60 lb, the engine analyzer looks like a portable television set. It “Televises” engine performance through a TV-like cathode-ray tube on an oscilloscope screen. Connected to the ignition system by two simple lead wires, it gives simultaneous pictures of the behavior of each cylinder in an operating engine.

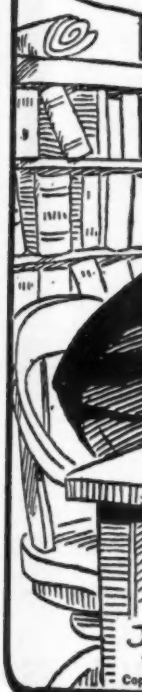
The analyzer detects virtually all ignition system troubles, including such common faults as spark-plug fouling and misfiring, broken plugs that are open or short-circuited, defective wiring and switches, worn distributor cam and shaft bearings, and defective coil or condenser.

Burned distributor points—one of the chief causes of poor engine performance—are easily identified by the analyzer. In addition it will

(TURN TO PAGE 14, PLEASE)

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Here's an extra different.

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The Cleat-Rib p
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Available w

LEE RUB
COMMERCIAL CAR



EXTRA TRACTION AND EXTRA MILES

Lee Cleat-Rib sets a new high in drive-wheel performance

Here's an extra-tread traction tire that's entirely different.

First, it will deliver up to 45% more mileage than a regular highway tire, but costs only about 10% more. Second, it is designed with the same overall diameter as a 100-level tire. You can mount the Cleat-Rib on inner dual-drive wheels for better than normal traction; under severe conditions, you can put chains on the outer tires for super traction.

The Cleat-Rib provides complete freedom from risk of tread cracking, and the special tread design assures a cool running tire. Wheel a couple into your shop and give them a try. They've got what it takes for *extra* performance and *extra* economy.

Available with All-Nylon or Rayon Cord

FREE!

8 1/2" x 11" J. R. Williams color-cartoon shop posters . . . promoting correct truck-tire maintenance. You'll get a new one every month . . . order as many copies as you need.



Lee Rubber & Tire Corporation
Conshohocken, Pa.

Please send me each month for six months _____ copies of the current J. R. Williams tire-maintenance poster. Send also catalog information about Lee Tires for _____ (type of service)

Company _____
My name _____
Street _____
City _____ Zone _____ State _____

Please attach coupon to your company letterhead

LEE RUBBER & TIRE CORPORATION • CONSHOHOCKEN, PA.

COMMERCIAL CAR JOURNAL, June, 1955



At Your Service

Continued from Page 12

diagnose pre-ignition faults as well as troubles caused by noise and vibration or combustion knock. The instrument may also be used to check ignition timing and operation of intake and exhaust valves.

In all, picture patterns depicting about 65 different engine ailments have been observed and identified by Socony-Vacuum engineers. When a particular engine fault has been detected on the picture screen, portions of the pattern can be blown up for more detailed study.

Power for the engine analyzer may be supplied by the battery of the vehicle being tested or from any ordinary 110-volt source. The leads are long enough to permit the road testing with the instrument placed on the floor of the vehicle.

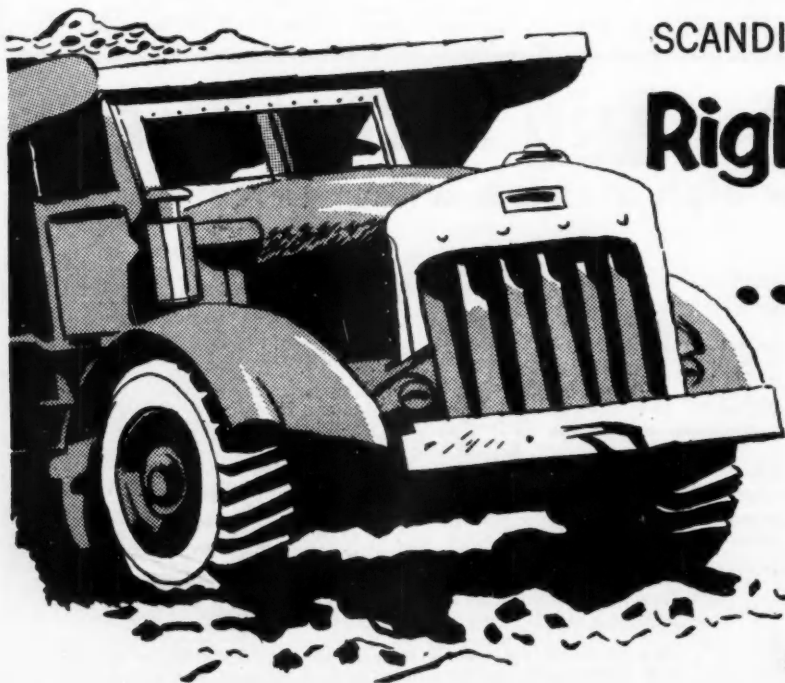
Its use in road testing makes it possible to detect engine faults that show up only under particular operating conditions.

Turbo Charger for Truck Engines?

ON PAGE 104, this issue, you'll find an announcement of a turbocharger for truck engines. It is an interesting development that has lots of implications for truck men in their fleet operations. For one thing — if it does what they claim—you can take a relatively small engine and get big engine results at lower cost, lower weight, and a gain in fuel economy. Naturally, the basic engine should be capable of handling this increased performance and most modern heavy duty engines presumably can.

Noteworthy too is that this turbocharger can be applied not only to gasoline engines but equally as well to diesel engines operating on either the two- or four-stroke cycle.

It may be noted that one of the main features of the turbocharger — exhaust supercharger, that is—is that it has no mechanical connection with the engine, consequently does not subtract power from the engine. Instead, it operates directly from the waste energy of the exhaust system, making it possible to consume the unburned fuel and gases that are wasted today.



SCANDINAVIA ZT BRAKE BLOCKS

Right From Start ...TO STOP!

Scandinavia ZT heavy duty brake blocks are specifically designed for abnormally heavy service.

If your brake problem involves heat checking or better stopping power, contact your friendly brake specialist jobber—when performance counts your choice, too, will be

SCANDINAVIA ZT Heavy Duty Brake Blocks.

BRAKE
BLOCKS

• **SCANDINAVIA** •

BRAKE
LININGS

DIVISION OF SCANDINAVIA BELTING COMPANY, WAREHOUSE: 250 CENTRAL AVENUE, NEWARK 1, N. J. • BOSTON • OFFICE: 744 BROAD STREET, NEWARK 1, N. J. • PLANT: CHARLOTTE 1, N. C. • CLEVELAND

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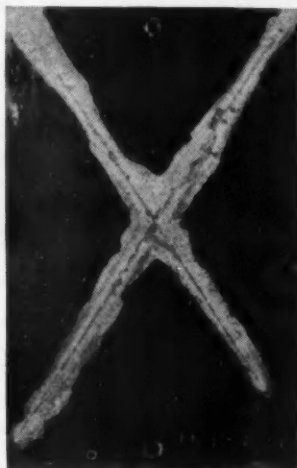
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COMMERCIAL CAR

WHICH TRUCK LASTS LONGER?



CORROSION spreads rapidly when paint was scratched, exposing untreated sheet metal.



DURIDIZED panel which got the same scratch shows how corrosion was prevented from spreading.

AUTOCAR, of course, with Heavy Gage Duridized Sheet Metal

Here's Why AUTOCARS Last and Last

Autocar sheet metal gets the special duridizing treatment in the modern, new Autocar plant at Exton, Pa. Then painted surfaces are baked in the infra-red ovens. To show what this means to Autocar life, special weathering tests conducted by Autocar engineers dramatically prove the superiority. The sheet metal panels shown above were painted under identical conditions and scratches made through the baked paint films into the base metal. The panels were then exposed to the elements. The results tell the long life story.



COMPARE these features, and you'll pick Autocar every time!

It's heavier-gage sheet metal than used on most other makes, but, more than that, there is extra care given Autocar sheet metal because of the *duridizing* process that produces on the cleaned metal surface a thin, hard chemical coating that increases paint life . . . resists corrosion and wear . . . provides a firm anchor for baked-on paint.

AUTOCAR TRUCKS

AUTOCAR DIVISION OF THE WHITE MOTOR COMPANY, EXTON, PA.

**SEND ME FACTS
THAT PROVE AUTOCAR LONG LIFE**

**AUTOCAR DIVISION, The White Motor Company
Exton, Pennsylvania**

Please send me copy of new Autocar Facts Book

Name _____

Position _____

Firm _____

City _____ Zone _____ State _____

3F



Laugh it off!

SIGN AT THE LOCAL TRUCK STOP DINER SUGGESTS: "TRY OUR ALPHABET SOUP. IT HAS GOT SOME OF THE NAUGHTIEST WORDS IN IT."

CCJ

Steno Sue: "What would you do if someone left you a million dollars?"

Steno Lou: "Nothing — from then on!"

CCJ

Freight Checker: "When I walked in on my girl friend last night unannounced, she blushed all over."

Lift Operator: "You mean you could tell that?"

Freight Checker: "Yeah. That's the reason she blushed."

CCJ

1st Freight Loader: "Did you ever have a romance in your life?"

2nd Freight Loader: "Yes, I had a beautiful school teacher. One day she asked me to stay after school."

1st Freight Loader: "Did you do anything wrong?"

2nd Freight Loader: "Yes—I didn't stay!"

CCJ

Truck Salesman: "When I take you in my arms, honey, something just seems to snap!"

Blonde Cutie-Pie: "Yeah, I know, handsome. Just a minute while I fasten it."

CCJ

The Air Brake Mechanic had been out on the town and really tied one on. Hailing a taxi, he crawled gingerly inside, falteringly gave the driver his destination. It happened that the opposite door had been left unlatched, and stumbling against it, the tipsy mechanic fell out. He picked himself up with great difficulty, said: "Thash pretty quick work. How much do I owe you for the trip?"

The truck fleet operator took a group of his department heads for a cruise. While going at full throttle the boat struck a submerged log that tore a gaping hole in her bow. Knowing that she would sink rapidly once she shipped enough water, the fleet operator called his people together and inquired, "Is there one among you who can pray?"

"I can," replied the Freight Claim Agent.

"Then pray, shipmate," ordered the fleet operator. "The rest of you put on life jackets, we're one short."

CCJ

Truck Driver to Diner Waitress

YOU NEED NOT TREAT ME LIKE A KING; IT'S NOT ESSENTIAL THAT YOU DANCE AND SING.

BUT DON'T YOU THINK YOU HADN'T ORDER.

COME OVER HERE AND TAKE MY ORDER?

— Cici Jay —



"I like to keep an eye on the outer office, Fred. So let's shine that window twice a day from now on!"

SLIM 'N GREASY, OUR SHOP ROUST-ABOUT, SAYS, "IT USED TO BE AN INSULT TO OFFER A GIRL A DRINK OF LIQUOR, BUT NOWADAYS SHE JUST SWALLOWS THE INSULT."

CCJ

OS&D Clerk: "What would you say if I kissed you?"

Freight Claim Steno: "I wouldn't be in a position to speak."

CCJ

Diner Waitress: "Oh, if I only had my life to live over again."

Truck Driver: "What would you do, honey?"

Diner Waitress: "I guess I'd make the same old mistakes, only I'd start sooner."

CCJ

Steno Sue: "Gosh, Louisa, you have such a facility with words that you make the description of a simple dinner date sound like a tale from the Arabian Nights. Honey, I bet you could write stories that would sell."

Steno Lou: "Gee, thanks, Susie. You know I did write a confession story once."

Steno Sue: "Did it sell?"

Steno Lou: "No, it was rejected, but the editor came all the way from New York to meet me."

CCJ

Tank Fleet Operator: "If I threw you a kiss across the desk would you consider me too bold?"

Petite Secretary: "Not at all, boss—just plain lazy."

CCJ

Steno May: "I really have a grand and glorious time when a rich handsome man kisses me."

Steno Fay: "Huh, I'm satisfied with just a grand."

Resume Work

COMMERCIAL CAR JOURNAL, June, 1955

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COMMERCIAL CAR

Prepared for trouble ?



You don't have to be armed to the teeth to avoid communications trouble. Not when your communications are supplied by the Bell System.

A planned program of preventive maintenance is an important part of Bell System service. Its purpose is to prevent interruptions.

In the laboratory, technicians are continually developing new and more efficient equipment. In the field, Long Lines technicians frequently visit critical points of your communications system to observe conditions and to improve operations.

Alternate routings are an integral part of plan-

ning by communications engineers to protect your service and prevent interruptions.

The entire program is backed by the Bell System's 79 years of communications experience.

We supply the trucking industry with reliable and economical private line telephone and teletypewriter service, and we maintain mobile radio systems and facilities.

Bell System communications engineers will be glad to survey your communications needs without charge. Call your Bell Telephone representative today.

BELL TELEPHONE SYSTEM

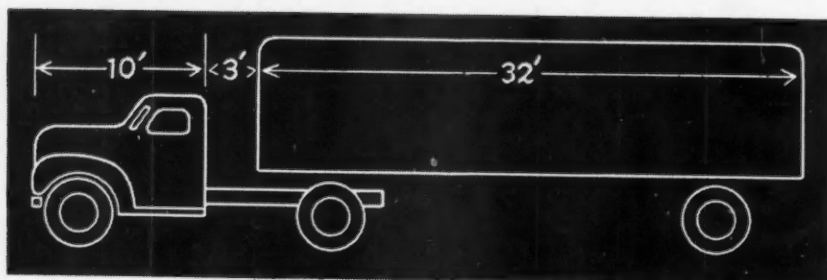


TELEPHONE

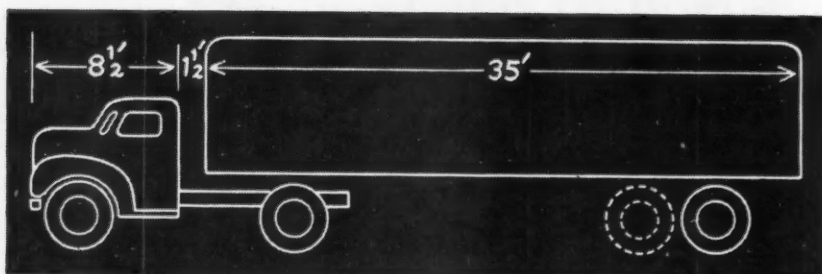
TELETYPEWRITER

MOBILE RADIO

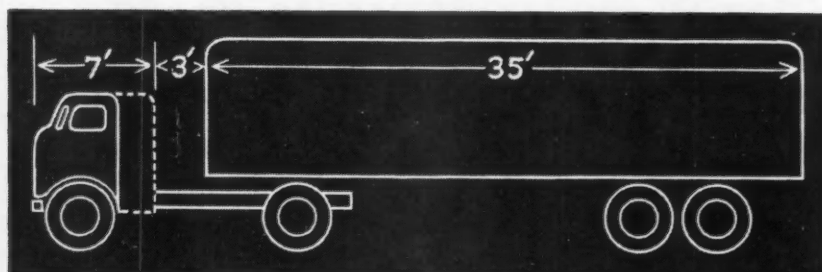
EASTERN 35-45 COMBINATIONS



Conventional "Old Reliable" could handle 32-ft trailer at best.

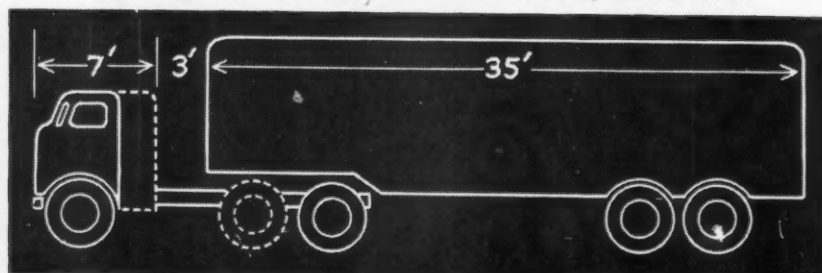


102-in. tractor had tight fit; later came 96 and 90-in. jobs



COE provides for sleeper cab and full interchangeability

High volume van boosts cube with lower floor, thinner walls



Quest for cube has no regional boundaries, only different solutions. Everybody wants shorter tractors, longer high-volume vans. With them come such problems as axle loading, king pin and landing gear locations, traction, power ... A Roundup by Bart Rawson

More Cube

Carri

AS MANY equipment-minded carriers know, a considerable revolution has been going on within tractor-trailer circles as a direct result of a little four-letter word—CUBE. As the density of average loads has been coming down (i.e., proportionately more TV sets, fewer asphalt tiles), the need for load space has been going up. Despite wide variations in the size of equipment, operators in all parts of the country (bottleneck states excepted) have been faced with the fact that all too often they can load physically full before they get up to legal weight limits.

Most of the early developments in the quest for greater cube came about as the result of individual cooperation between operator and manufacturer to meet the specific needs of a given area. Often they were widely separated both by geographic location and varying size requirements. But all summed (as they are here for the first time in print) they make an impressive array of progress that should be of interest to anyone who faces the problem of greater cube today or tomorrow.

The accompanying diagrams outline progress to date in various parts of the country with emphasis on length of various units and combinations and give us a logical starting point for discussion. But, while length is the most important single factor in obtaining higher cubic load space, there are important additional considerations. These include traction, king-pin, and landing gear location, axle loadings, tire sizes, sliding tandems, and a whole series of developments that have contributed to the creation of that special beast of burden, generally known as the high-volume van. We will try to touch on all of them briefly.

Evolution in

Until a few years ago, most operators' loads were conventional trailer loads. Little attention was given to level floor trailers to 32 ft. As the need went up, the trailer but for conventional fit within pre-

maximum length.

They could cab-over-engine cost was high operative res and AMA on the 102-in. tractor. It worked just r between cab and to 18 in. and be 3 ft from trailer, the co 18 in. (which and interchan ously jeopardiz

Next was th ment of a fu only 96-in. b dimension. Th successfully b even with die the latter cas be tilted and re side of the fire most trailers, radii and king be carefully wa

90-in. Dimensi

Just as this White carried further, annou bumper-to-back series again w power (see pag one it appear (TURN TO NE

COMMERCIAL CAR

Carriers' Battle Cry—Makers' Challenge

Evolution in the East

Until a few years ago most eastern operators seeking maximum loads were content with the conventional tractor — which paid little attention to length — and a level floor trailer ranging from 28 to 32 ft. As the demand for space went up, they wanted a 35-ft trailer but found that, with the conventional tractor, it would not fit within prevailing 45-ft overall maximum length restriction.

They could do it easily with a cab-over-engine design but the cost was higher. Then began cooperative research through ATA and AMA on the development of the 102-in. bumper-to-back-of-cab tractor. It would fit if everything worked just right. But space between cab and trailer was limited to 18 in. and the king-pin had to be 3 ft from the front of the trailer, the corner radii had to be 18 in. (which cut into load space) and interchangeability was seriously jeopardized.

Next was the successful development of a full size tractor with only 96-in. bumper-to-back-of-cab dimension. This is now being used successfully by many operators even with diesel power. But in the latter case, the engine must be tilted and recessed into the right side of the fire wall. It can handle most trailers, but again corner radii and king pin location must be carefully watched.

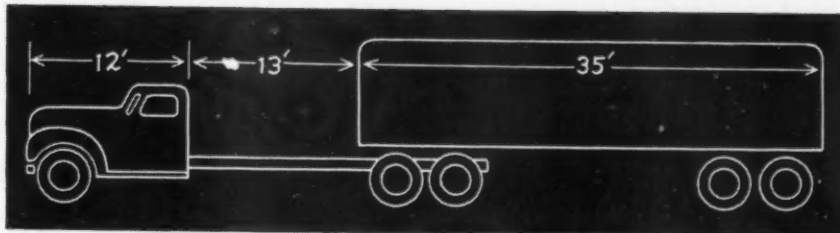
90-in. Dimension

Just as this issue went to press, White carried the ball one step further, announced its new 90-in. bumper-to-back-of-cab 9000 TD series again with Cummins diesel power (see page 100). With this one it appears that full inter-

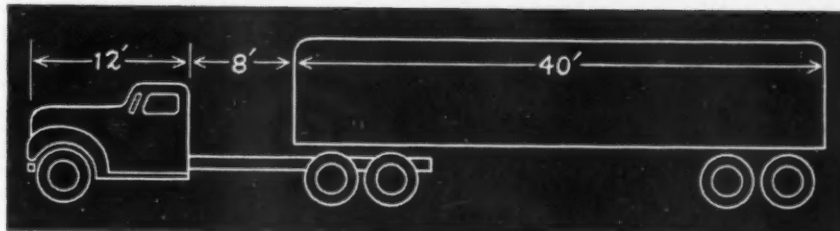
(TURN TO NEXT PAGE, PLEASE)

The drawings on these and following pages have been specially prepared for this article, are intended to convey quick highlights in the development of higher cube combinations in various parts of the country. They are scaled for height and width only and in a few cases, such as the one immediately below, have been exaggerated to show full legal length. They do not attempt to show exact wheel bases or exact king pin locations.

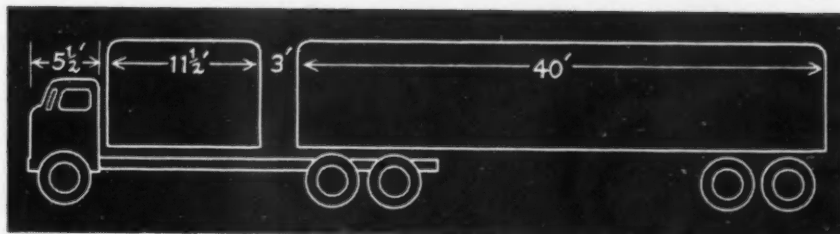
WEST COAST "SEMI" COMBINATIONS



Bridge formulas lead to "goofy" design, much wasted space

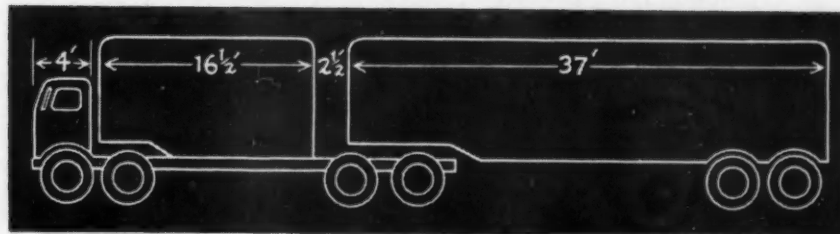


40-ft trailer helps fill the gap, but won't meet all laws



COE "Dromedary" boosts space, usually carries 35-ft trailer

PIE's newest has two front axles, high volume throughout



More Cube . . . Carriers' Battle Cry

Continued from Page 67

changeability has been attained for any type trailer.

For others the full COE type is preferred and is virtually a must when sleeper cabs are desired. As a footnote, last year's sales of all COE types were up more than 1500 units, compared with an overall drop in total domestic production of more than 200,000 units. But since most eastern states limit the

trailer to 35 ft, there has been no need for the extremely compact cabs developed on the West Coast.

Along with this tractor progress came the evolution of the high volume trailer which will be discussed right after a look at West Coast developments.

Progress in the West

While these developments have

been going on in the East, western operators have been battling for more load space within their longer overall combination lengths—usually 60 ft—and their greater GCW's, ranging from 72,000 to 76,000 lb. The accompanying drawings again spell out the progress for various types of combinations. A few have been exaggerated to show full utilization of length even though many stay well within the maximum of 60 ft.

Beginning with the familiar 35-ft trailer on the heavy long-wheel-base tractor, it will be recalled at once that the western operator's major problem has been that of meeting the bridge formulas which require longer-than-necessary wheelbases and often more space between many of the combinations. Fleetmen eyed this wasted space with concern. A few helped fill the gap by the simple expediency of going to a 40-ft trailer but this is often an ungainly rig and is not permitted in all states.

Then came the development of the first dromedary type. By switching from a conventional tractor to a cab-over-engine job, an 11½-ft box could be fitted between cab and the fifth wheel and, if desired, a 40-ft trailer could be carried behind it. However, most still use the 35-ft trailer giving an overall length of approximately 55 ft. One of the problems with the dromedary was weight control and it was generally conceded that it was mostly for "balloon" freight, since the front axle could not be loaded unduly.

Dromedary Plus Pancake

Pacific Intermountain Express' answer to this problem is the brand new experimental dromedary utilizing a very short cab, horizontal engine, two front axles and a high volume type van as well. As a result, they are getting a 16½-ft box which can be loaded quite heavily in front of the fifth wheel and have room for a 37-ft high volume van behind it. With total available length of 53½ ft of loading space (outside measurement) it probably has the highest cubic capacity of any combination on the highway today.

Parallel developments have been

going on in the full-trailer combinations. full trailer could get 2 the truck and Cab-over-engine these figures newest "sp oped by F horizontal e back-of-cab ft, bringing ft and the t

In the d semi-trailer semi-trailer dolly), early they could c With the could be ste with the maker" cab two 25 ft tr

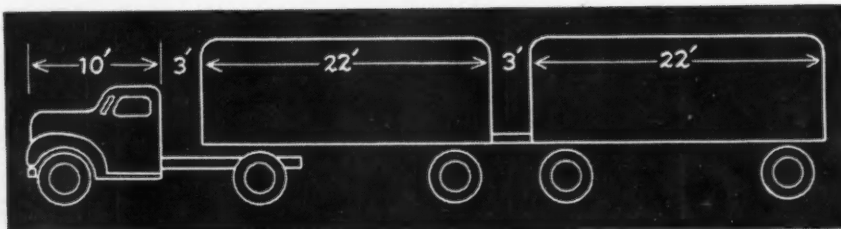
Still another bottom rig into operation pany. On use a cab-over 32-ft trailer of the 48 s western op short 16-ft dolly behind bined rig t shows in th bottom illust

FWD Spec

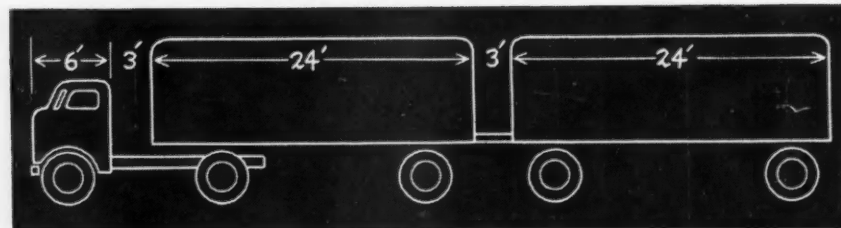
Meanwhile tions in the c Wheel Drive working out designs with traction an The first wit design and back-of-cab c hauling of s states which ft. On this power is ap axles, the las tor being a pin is placed tandem center ing of the r the tandem u

FWD's ne duction of totaling 5 f mitting the (TURN TO

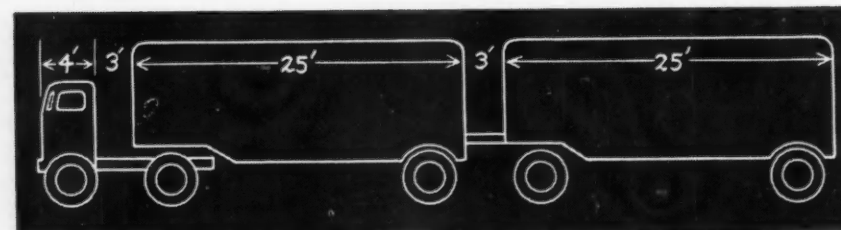
WEST COAST "DOUBLE BOTTOMS"



Another "old faithful" is this early double bottom concept

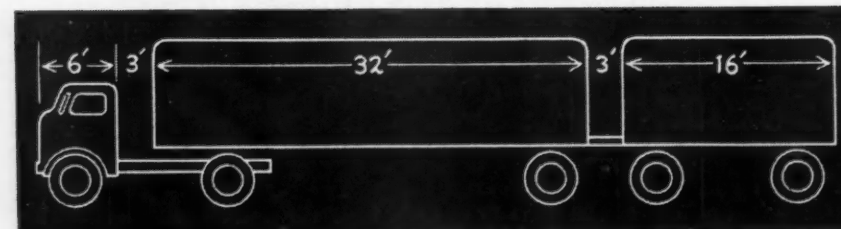


COE design adds at least 2 ft of load space on both trailers



"Spacemaker" adds two more feet, provides four-wheel drive

Bekin's east-west "convertible" drops small unit at Denver



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AL, June, 1955

going on in both the truck and full-trailer and double-bottom combinations. The earlier truck and full trailer rigs were lucky if they could get 21 ft of load space on the truck and 26 ft in the trailer. Cab-over-engine design brought these figures to 23 and 28, and the newest "spacemaker" cab developed by Freightliner (also with horizontal engine) cut bumper-to-back-of-cab measurement to only 4 ft, bringing the truck body to 25 ft and the trailer remaining at 28.

In the double-bottom class (a semi-trailer and full trailer or two semi-trailers with converter dolly), early designs were good if they could carry two 22-ft trailers. With the cab-over design, this could be stepped up to 24 ft and with the Freightliner, "space-maker" cab it is possible to couple two 25 ft trailers.

Still another aspect of the double bottom rig has recently been put into operation by Bekins Van Company. On this combination they use a cab-over engine tractor with 32-ft trailer which is legal in all of the 48 states. Then for far-western operations they add a short 16-ft semi with converter dolly behind which brings the combined rig to a full 60 ft. This shows in the last of the double bottom illustrations.

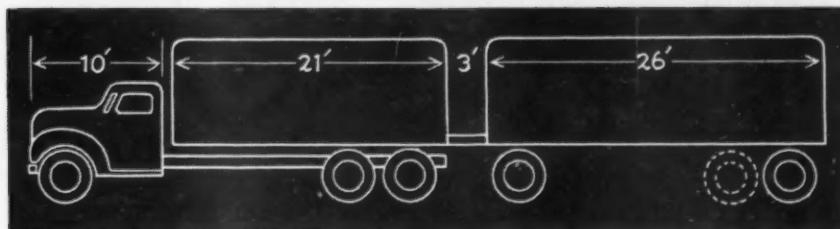
FWD Special Designs

Meanwhile, for special operations in the central states, the Four Wheel Drive Auto Co. has been working out some very interesting designs with special emphasis on traction and load distribution. The first with conventional tractor design and a 102-in. bumper-to-back-of-cab dimension, permits the hauling of a 36-ft trailer in the states which permit a total of 47 ft. On this rig, now in operation, power is applied to the first two axles, the last axle of the 4x6 tractor being a trailing unit. King-pin is placed well forward of the tandem center to permit good loading of the front axle as well as the tandem unit.

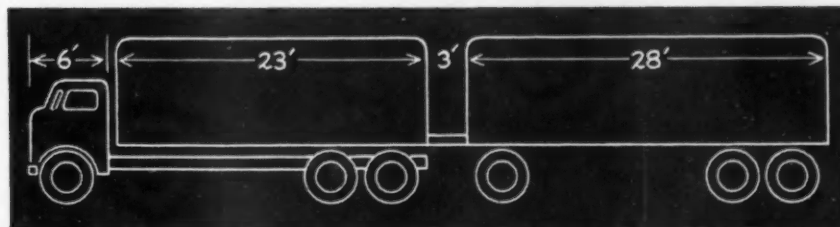
FWD's next step was the production of a one-man cab unit totaling 5 ft in length and permitting the use of a 38-ft trailer,

(TURN TO PAGE 164, PLEASE)

WESTERN TRUCK-FULL TRAILERS

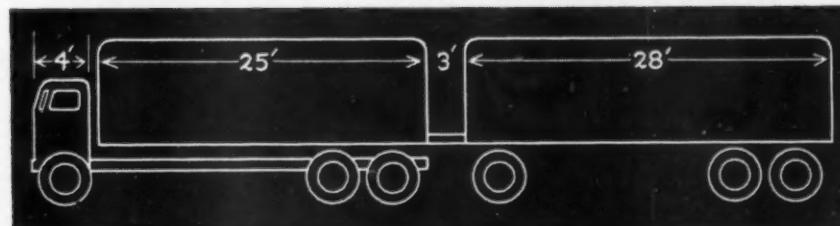


Conventional truck, full-trailer can get this space with luck

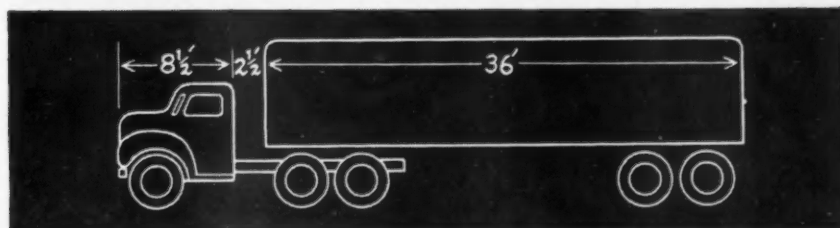


COE Design pushes load space out another 2 ft in each unit

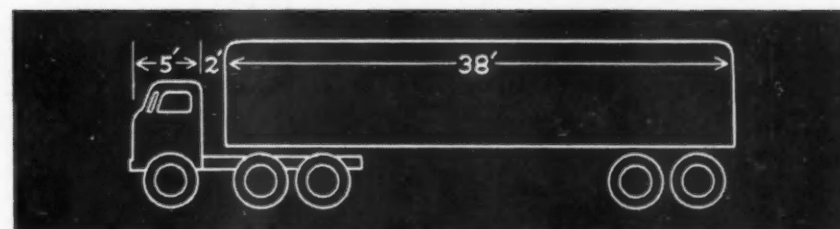
"Spacemaker" adds more; sometimes brings horizontal engine aft



FWD SPECIALS FOR CENTRAL AREA

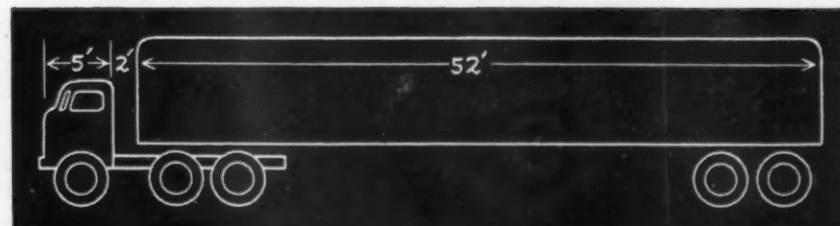


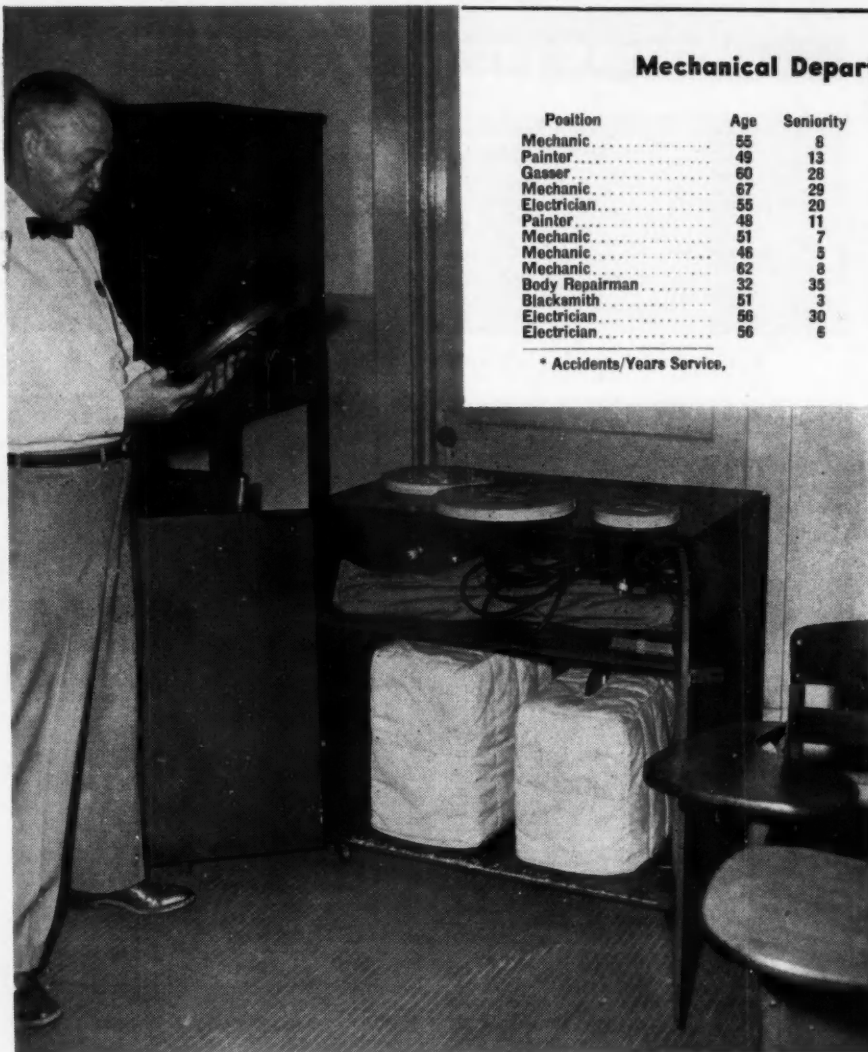
Here major emphasis is on traction—through first two axles



This modified COE meets 45-ft length with 38-ft trailer

"Dream" model is engineering wise possible for 60-ft lengths





Mechanical Department Personnel Rating

Position	Age	Seniority	Accident Rating*	O	E	I	C	S	Merit Rating
Mechanic.....	55	8	0/9	15	20	18	20	18	81
Painter.....	49	13	3/18	20	18	18	15	20	81
Gasser.....	60	28	3/18	18	20	18	20	20	96
Mechanic.....	67	29	1/8	18	20	20	18	20	96
Electrician.....	55	20	6/38	18	18	18	18	18	90
Painter.....	48	11	2/23	18	18	20	20	18	94
Mechanic.....	51	7	8/27	18	20	20	18	20	96
Mechanic.....	46	5	1/17	18	20	20	18	20	96
Mechanic.....	62	8	0/25	18	20	20	20	20	96
Body Repairman.....	32	35	3/7	15	18	20	20	18	81
Blacksmith.....	51	3	5/26	18	18	18	20	20	91
Electrician.....	56	30	2/27	18	18	20	20	20	96
Electrician.....	56	6	9/26	20	20	20	12	20	92

* Accidents/Years Service.

Left. Author Timblin looks over part of his training aids. Above. Personnel rating guide picks out top men. Text describes Muny's rating system.

By Claude Timblin

Supt. Maintenance
Youngstown Municipal Railway Co.

Training-Incentive Plan Raises Bus

Shop efficiency is a matter of morale, skill and supervision. Here's how Muny raises PM s

V GOOD INSPECTION practices, a thorough training system, and a practical incentive plan for mechanics have kept maintenance efficiency at Muny at a high level. I'm proud of our work here, but like most maintenance superintendents I'm always looking for improvements. We maintain 60 diesel buses and 53 trolleys in a

shop that is not gaudy but is complete from the standpoint of tools and equipment. With 50 mechanics we have been able to reduce maintenance costs at a time when management needs all the help it can get from us. And our equipment is in better condition than at any time in my 38 years with the company.

We have hit the inspection routine hard recently and a reduction in road failures has followed. We have completed well over 800,000 man hours in the shop without a lost time accident. We have profited immeasurably from new tools and new methods of completing jobs which have been provided by the men themselves in our incen-

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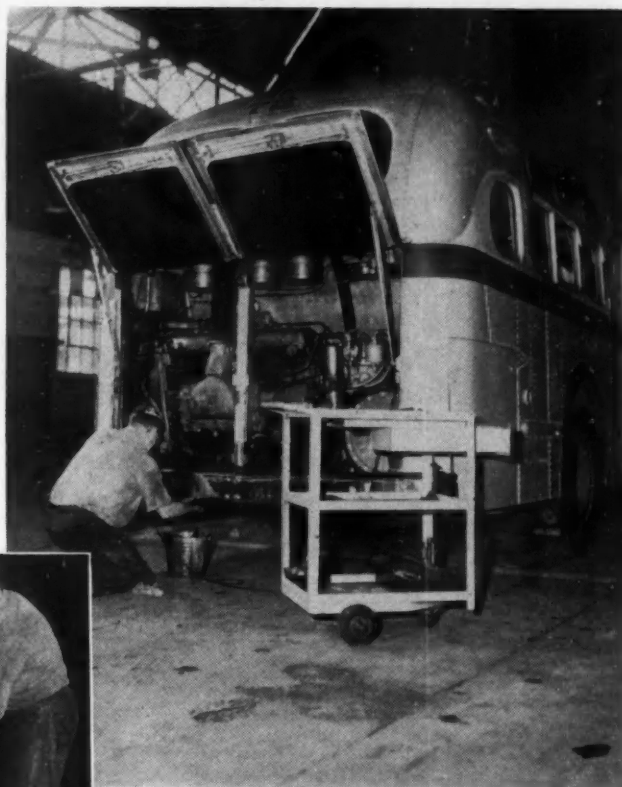
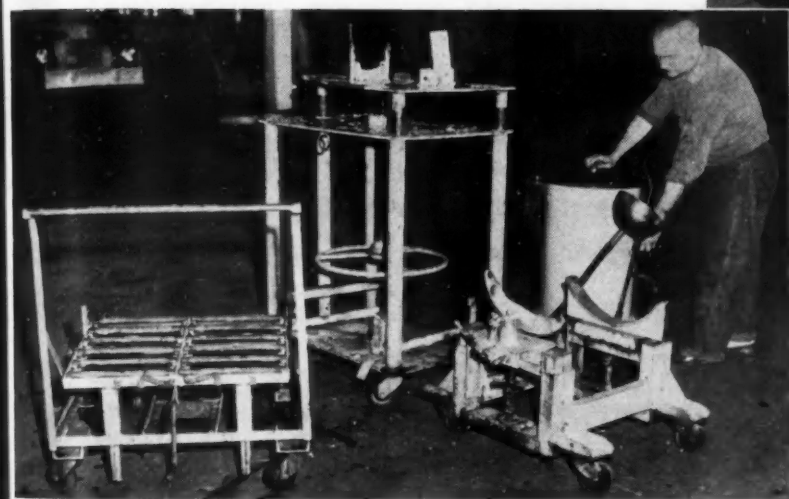
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L, June, 1955



Above. Good training enables mechanics to complete bus inspection with a minimum of delay. Parts are replaced on basis of predetermined mileages

Left, above. A portable "buggy" contains all parts man needs for the job

Left. Incentive program cultivates mechanics' interest in building better tools and equipment to do the job

ses Bus PM Standards

raises PM sights and cuts maintenance costs

tive system. Here's the way these programs fit together.

Inspection Practices

The inspection itself is guided by a brief form to show the mechanic generally what to do. However, we rely primarily upon his judgment in completing the job. That's where the training program

comes in. Units are replaced on a mileage basis, rather than condition. The chart will show what we expect to get from some of the major components of the gas and diesel buses. While some may not agree with this procedure, we actually find we are getting over 70 per cent of the life of these components under this program. Now,

suppose we could raise the blower life to 90,000 miles in place of 80,000. True, we would realize 10,000 more miles—but we know from experience that a failure would result at some point in this extended mileage. And road failures are too expensive for us.

The inspection itself is rather unique, I think, in that the inspector is given a kit containing all of the parts he will need for the scheduled job. These are made up in the parts room and are ready for him in a packaged unit set in a portable "buggy" whenever he presents the make and model bus he is working on. Thus there is no lost time in going back to the parts department for something he forgot. We know from experience just about what he will require, and when he gets to that

(TURN TO PAGE 144, PLEASE)



Shop Hints from McLean

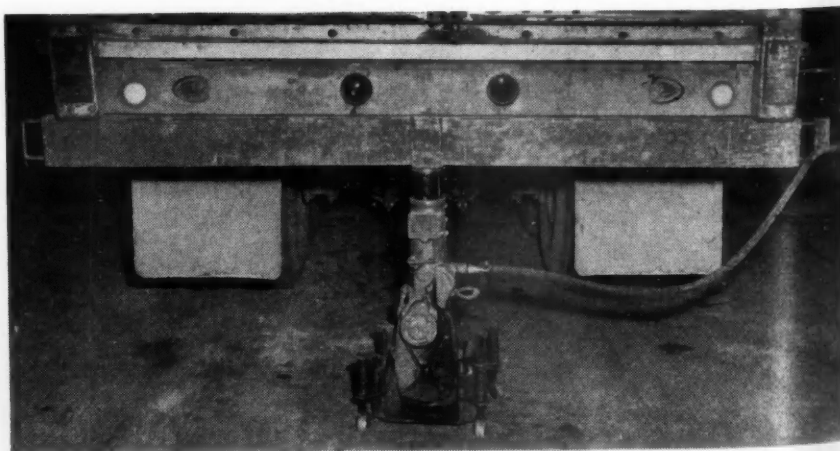
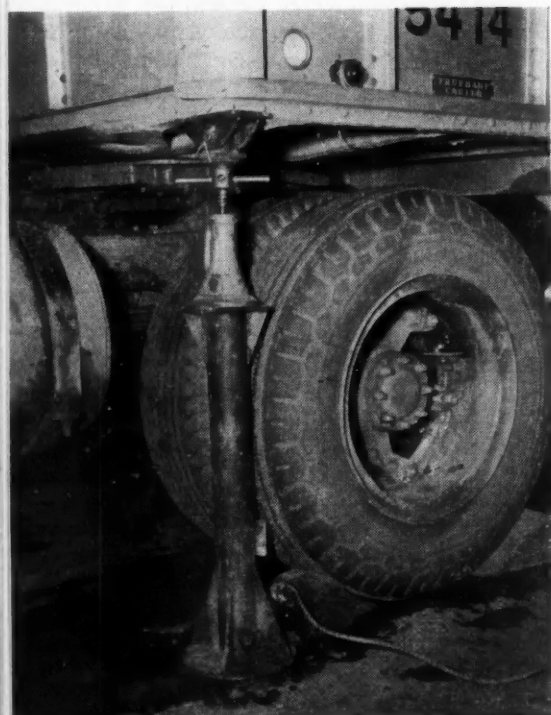


A Separate Dynamometer Shop

McLean's central shop at Winston-Salem, N. C., (above) performs all overhaul work on McLean's over-the-road tractors and trailers, furnishes major assemblies for McLean maintenance shops in other locations. It can house 20 tractors in section at left, a dozen trailers at right. Fast inspection lane is at far end, offices, parts store room and unit overhaul shops in center.

Chassis dynamometer is housed in separate building at rear of parking lot, takes noise away from main shop.

A fleet shop visit shows in a dozen pictures



Portable Air Jack Boosts Trailer Rear Ends

Efficiency of Duff-Norton air jack (above) was greatly improved by adaption of new base and box-section bar mounted on top. Spring loaded casters roll freely with no load, permit jack to rest firmly on concrete when load is applied. Bar distributes lift evenly to entire rear of trailer. McLean found weight shift was too much for driving axle, uses two screw jacks (left) on portable tubular stands to take load on front end.

Dolly Rem

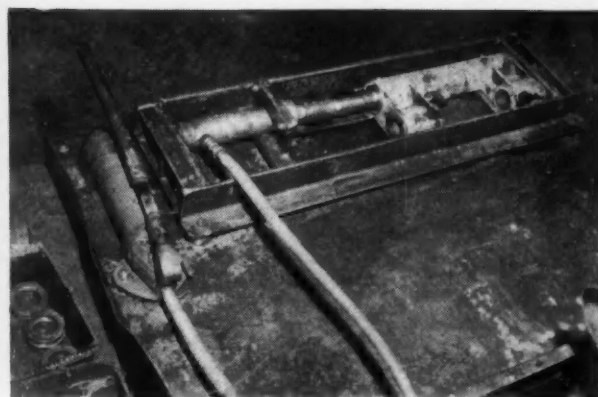
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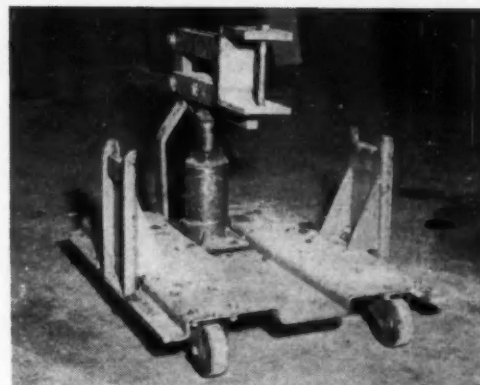
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Dolly Removes Axles for Annual Overhaul

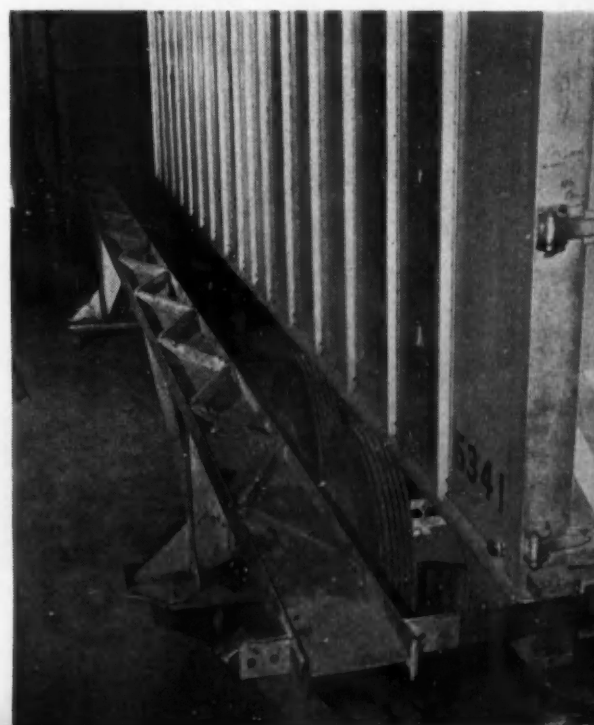
McLean's maintenance schedules call for once-a-year overhaul of torsion bar suspension unit on trailers. Special axle dolly (above and right) lowers and raises the entire axle assembly by means of built-in hydraulic jack. An old fifth wheel plate was used for the dolly base. Outriggers form convenient stand for all axle maintenance operations.

Routine torsion bar overhaul includes replacement of bushings using handy jig and hydraulic ram shown at upper right. Torsion bar itself is turned 180 deg., rekeyed and reused.



I-Beam Straight Edge

A straight edge has often been called the engineer's best friend, but it seldom comes in a 34-ft size. This 16 x 1/2-in. I-beam is reinforced top and bottom with 2 x 3/4-in. strip steel and is mounted on two all-welded bases with swivel casters. It can be bolted to both ends of a trailer by means of alternate fixtures, serves as a base for hydraulic jacks with chain pulls, handles any horizontal alignment problems. Rings imbedded in floor provide base for vertical alignment.



ideas you can use to speed maintenance

THE HEADQUARTERS shops of McLean Trucking Co. in Winston-Salem, N. C., are so big and so well-equipped that a full description might make boring reading for most readers. But after three recent trips by two CCJ editors, we came away with the 12 pictures shown on these pages. Each is a practical shop hint that can well be put into service by virtually any fleet in any field.

Head man of this maintenance enterprise is Cecil Egger, vice-president and general manager of Modern Automotive Services, Inc., McLean's wholly owned maintenance subsidiary. To him and his associates goes full credit for these worthwhile ideas.

Touciest points around this particular shop are its size and the number of vehicles on the lot. "But," counters Egger, "it's our main shop, handles all road equipment maintenance for 45 million annual miles. Less than 3 per cent of accidents are charged to mechanical failure and our availability factor for road equipment averages 94 per cent."

If you're bothered by that 3 per cent figure, remember McLean's safety record is top grade. The full story appeared in CCJ, Sept., '53.

More on next page ►

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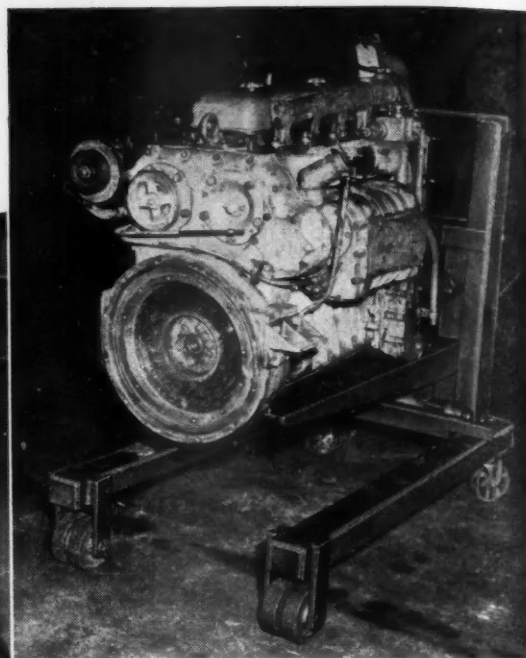
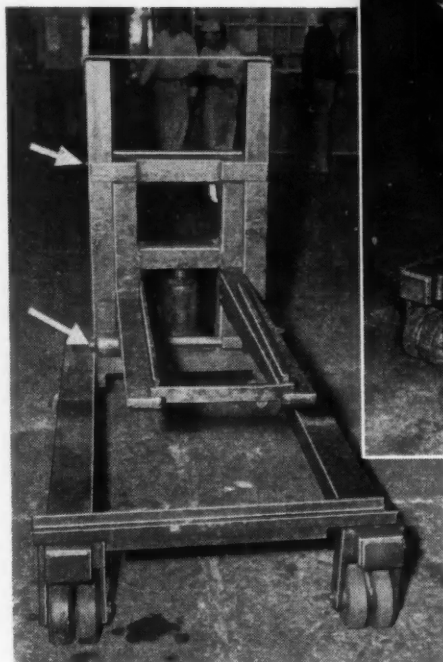
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Shop Hints from McLean

Continued from Page 73

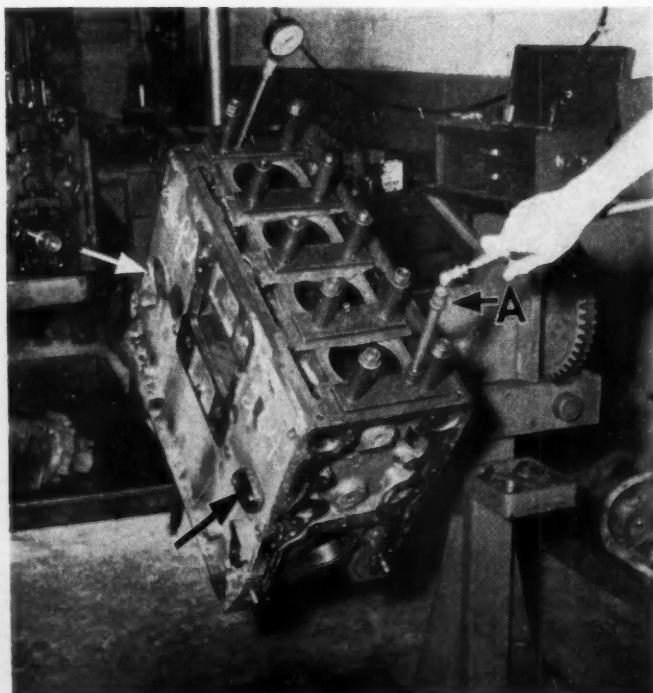
Engine Dolly Makes COE Changes Easy

Removal of the 4-71 diesel engine from GMC cab-overs is a snap with this hydraulic stand. In operation the base rolls under front axle, fork slides under engine. Channel iron across base in foreground and strap across forks are removable, serve only for alignment and locking purposes. A 20-ton portable jack does all the lifting, and two sets of rollers (arrows) take vertical and horizontal thrust on the uprights. With this equipment it is not necessary to raise cab. With engine aboard, as shown at far right, one man can roll it easily.

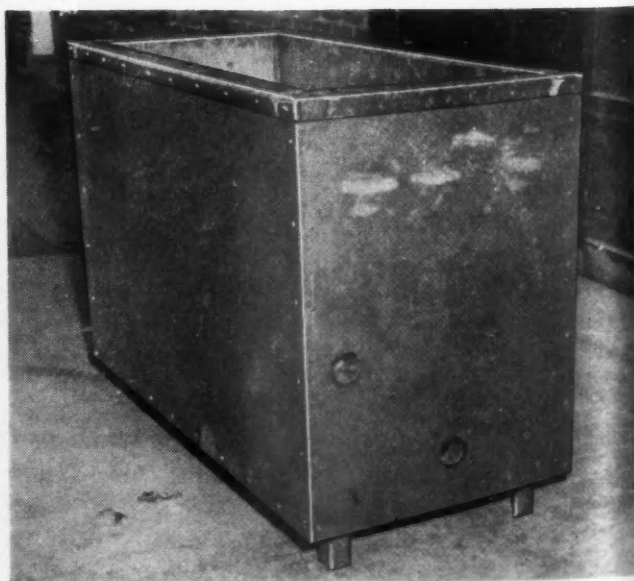


Heated Water Tank Checks for Leaks at Operating Temperature

On this engine stand, four-cylinder diesel block is readied for underwater leak test. Rubber gaskets are fitted across top ports and over side inlet and outlet (arrows). Air is pumped in at "A" and pressure is recorded on gage at opposite end. There is a similar set up for cylinder head assemblies as well.



Once sealed as indicated at left, block or cylinder head assembly is lowered by crane hoist into special stainless steel test tank. Shown here in process of construction, it will be fitted with thermostatic electric heating element (upper hole) and drain valve (lower hole.) McLean's experience indicates that the only sure way to test for water leaks is to perform test at exact operating temperature normal. In this case, the figure works out exactly 188 deg. F.



By H

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THERE'S cleaning, as of inspiring along with the You want to best effort, prizes or the and quit trying. Here at the "current-basi for keeping 5 volume of lau rug cleaning. Quotas are a month and of a given m They are se which they they are base prior to the month gives the sales figu 50 men.

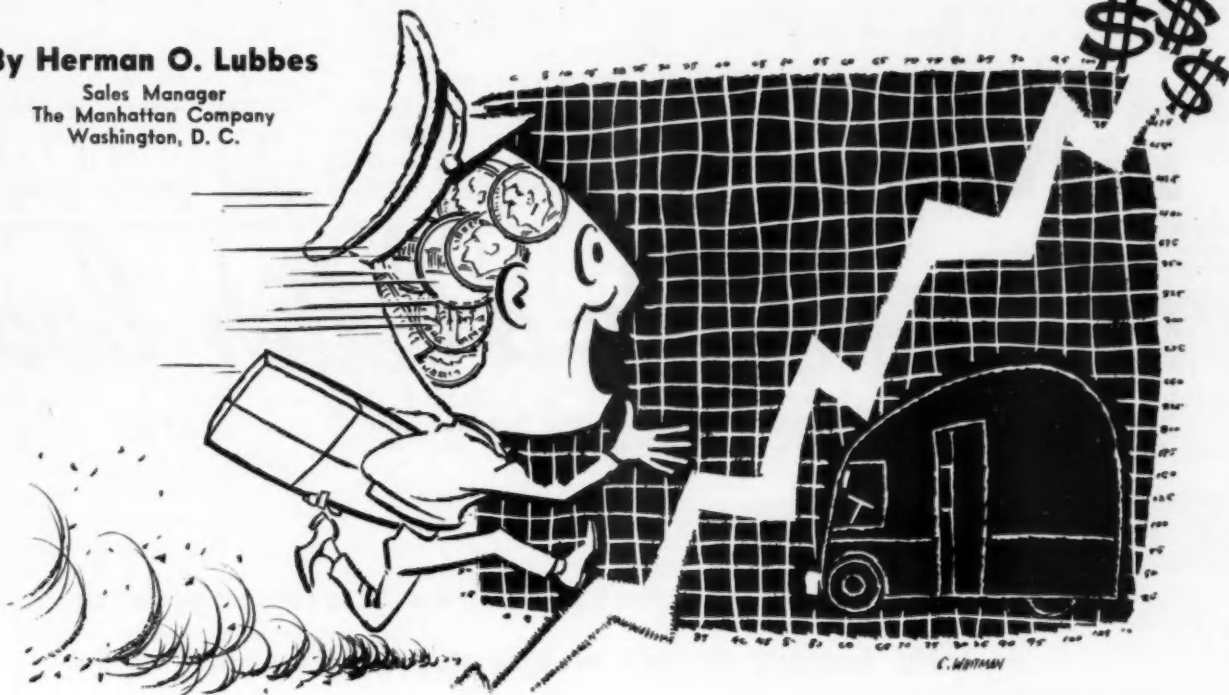
Here's How

As an exa \$2000 worth ing the month for this month um at the ra amount to \$2 cent times 10 At this sam in March, wh cent (\$24,691 bonuses are

COMMERCIAL CA

By Herman O. Lubbes

Sales Manager
The Manhattan Company
Washington, D. C.



Quota-Bonus Plan Inspires Route Salesmen

**"Current-basis" system keeps men encouraged,
adjusts for ups and downs in sales conditions**

THERE'S a problem in laundry and dry-cleaning, as in most route delivery business, of inspiring route salesmen to go on selling along with their pick-up and delivery chores. You want to keep the good men keyed to their best effort, but they must not take all the prizes or the other men become discouraged and quit trying.

Here at the Manhattan Co. we feel our "current-basis" quotas are greatly responsible for keeping 50 route salesmen pushing up our volume of laundry, drycleaning, household and rug cleaning, and storage.

Quotas are set for periods of approximately a month and are based on the average ratio of a given month's volume to yearly volume. They are set shortly before the month in which they are effective. Most important, they are based on sales for the second month prior to the effective month. A gap of a month gives the necessary time to compile the sales figures and compute quotas for the 50 men.

Here's How It Works

As an example, Mack Brown brings in \$2000 worth of laundry and drycleaning during the month of January. The normal ratio for this month is 8.1 per cent. A year's volume at the rate he produced in January would amount to \$24,691 (\$2000 divided by 8.1 per cent times 100).

At this same rate he should bring in \$1975 in March, which has a normal ratio of 8.0 per cent (\$24,691 times 8.0 per cent). However, bonuses are paid for progress, not for just

holding the line. So the quota is based on producing \$10 weekly or \$40 a month over the norm. In March, therefore, Mack has a quota of \$2015. This bonus margin of \$40 monthly is the same, no matter how high or low the norm may be.

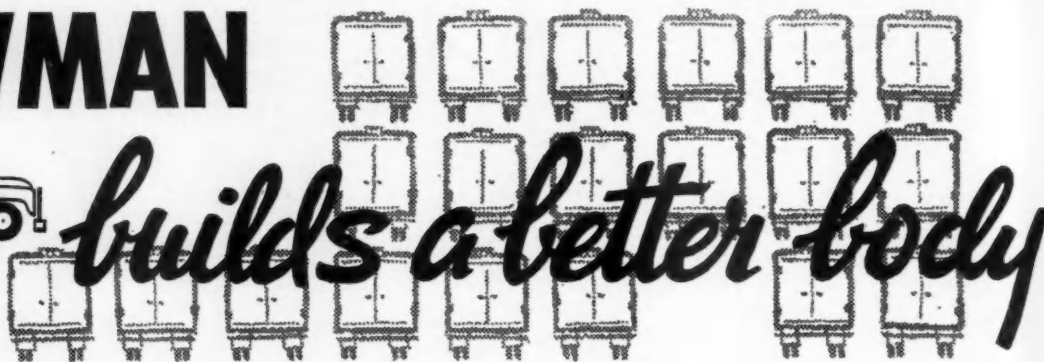
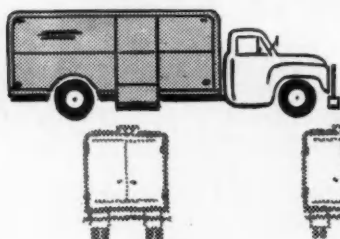
Up and Down Adjustment

Suppose Mack beats the March quota by \$85 for a total of \$2100. His May quota, which is based on March instead of January, is relatively stiffer, which is important on a healthy growing route. It figures \$2100 (March sales) divided by 8.0 per cent (March ratio), times 100, equals \$26,200, times 9.3 per cent (May ratio), equals a May norm of \$2437, plus the standard increase of \$40, which totals \$2477.

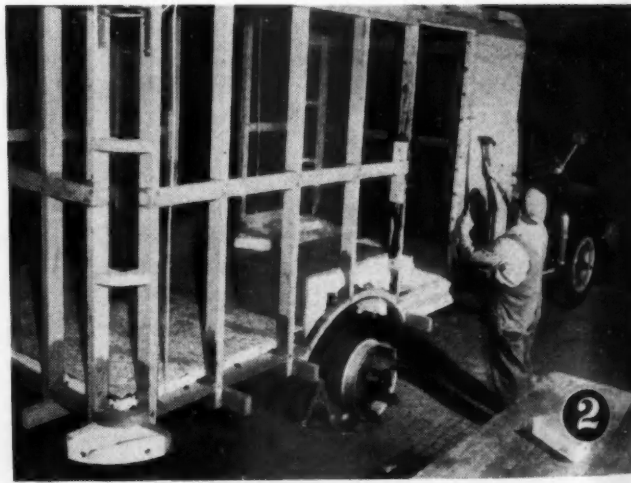
On the other hand, Mack may have been sick in March, or a competitor opened a new store in his territory. His March volume dropped \$85 as a result to \$1930. On this basis Mack's

(TURN TO PAGE 112, PLEASE)

BOWMAN



**Chicago milk delivery fleet summarizes 32 years experience
in body building in this step-by-step picture story high-
lighting construction of a wholesale delivery reefer unit**



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ADMITTEDLY not many fleets are building their own bodies today. It is not always possible to compete with commercial body builders, and again most fleets prefer to devote their efforts to transportation—farming out such work to specialists.

Body repair, however, is a definite part of maintenance in many fleets. Certainly repair or building of insulated bodies is a major concern to those fleets that have perishable merchandise like milk to handle where maintaining proper temperatures is an important factor in delivering to the public a satisfactory product. With that in mind, **COMMERCIAL CAR JOURNAL** has provided some of the highlights of insulated body building in this pictorial article based on materials and methods employed by Bowman Dairy Company, Chicago.

Bowman Dairy should know how to build truck
(TURN TO PAGE 114, PLEASE)

1 First step is the sawing of roof bows, up-rights, door posts and bracing from clear oak

2 Framing is held rigidly with screws and special angle braces. Floor is bolted to sills

3 The 3/4-in. subflooring is insulated with 2-in. cork. 1/2-in. plywood is used under steel floor

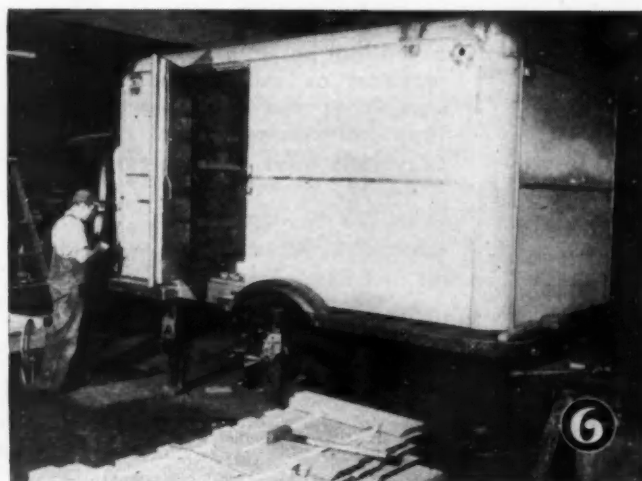
4 Three inches of fiberglass is used in sidewalls. Panels of 26 gage steel line interior

5 Steel flooring is welded at seams. Ceiling is of 1/2-in. plywood. Slat protect sides

6 Steel tread rubrail of 12-gage steel is welded to body and fender. Stripping is bolted on

7 Mudguard, rolled out by local shop, is same as that used on the smaller delivery vehicles

8 The finished body which Bowman says is good for 10 years of service without maintenance



Fortier Reaches for

The Ultimate in Part



L. J. Reynolds, Maintenance Manager
Fortier Transportation Co., Fresno, Cal.

Transportation companies are becoming aware that basing preventive maintenance practices on vehicle miles is, in effect, working in the dark maintenance-wise. They are discovering that records based on vehicle miles are inadequate when it

comes to forecasting when a given unit will fail. The result is that individual units are often torn down before the normal life is used up or else used too long and break down resulting in costly major part damage and delay time.

Some companies believe that they may have found the solution to this problem in the "unit numbering system." Although this system varies to a considerable degree among fleets, essentially it is simply a case of numbering each major unit and keeping a continuous record of each unit throughout its life regardless of the vehicle it is in. This allows fleets to spot items needing frequent repair, to investigate cause of failure, to arrive at corrective measures for increasing the part's life. It shows failures which can be taken to the manufacturer for credit or aid in improving the life of the part. It also allows them to replace all parts which fail at nearly the same mileage at the same time.

FORTIER Transportation Co., located just south of Fresno, Cal., on Highway 99, has a fleet of nearly a thousand vehicles, and a reputation for canny operation. Fortier has an operation which for sheer diversity is not likely to be equalled in this country. They haul logs from the mountains, cotton to the sea, liquid sugar, bulk sugar, wine, brandy and chemicals, as well as hay and groceries. Their trucks run over some of the best highway in the country and into places where it is necessary to use two power units, one pulling and one pushing, on each trailer.

One of the problems encountered by Fortier when they introduced the unit numbering system illustrates in dramatic fashion why they feel it is worthwhile.

Completely new units were simply given a number and presented no problem at the time the change was made. But when it came time to number those units already in use, it became apparent that only a very loose estimated mileage could be assigned them simply because previously no record had been kept of the unit as it moved from vehicle to vehicle.

How, for example, would you estimate the mileage of a transmission which may have been in one vehicle or six? The foreman remembered, or thought he did, that this particular transmission had been "lost" in the stockroom for several months and therefore hadn't many miles on it. Another he "thought" had been used quite a lot. And so it went. An eye

opener which confirmed the decision to change to the unit numbering system.

Unit Numbering System

Now contrast this guessing game with the present situation. Engines, cylinder heads, fuel pumps, transmissions, differentials, starters, generators and 5th wheels are given numbers.

We go to the maintenance records office and pick a unit number at random. It turns out to be MT (main transmission) 215. This transmission was first given a number on 10-28-52, when it was taken out of vehicle 2263 because a pocket bearing failed. It was then put into vehicle 2257. Next the record shows it was removed from vehicle 2257 because the

third gear we note made at it was discovered broken off, and either abnormal poor driver p was called to road foreman happened on 1 ord shows th paired and re vehicle. On 5 removed from into 2263 on removal: Main And so the rec to 9-4-54, whe vehicle 2260, bearings repl Note that show up imm this is not a

Parts Life

TEST STAND		FUEL PUMP OVERHAUL		PARTS USED		REMARKS	
BEFORE OVERHAUL	AFTER OVERHAUL	BEFORE OVERHAUL	AFTER OVERHAUL	BEFORE OVERHAUL	AFTER OVERHAUL	BEFORE OVERHAUL	AFTER OVERHAUL
C.C.							
MM							
VAC PRESS							
HEAD PR.							
SEAL PUMP							
PRSS.							
IGLS							
QPH							
		TOTAL					

OFF EQUIP. _____ DATE _____ ON EQUIP. _____ DATE _____ MILES _____ UNIT NUMBER _____
 PREVIOUS OVERHAUL BY _____ THIS OVERHAUL BY _____ DATE _____

Above. Unit record slip is put into grease-proof envelope and wired to rebuilt unit until the part goes into another vehicle. It then becomes part of unit file. Left. Signal device wired to mechanics' stalls shows parts man when repairs or parts are required, speeds repairs



numbering system, officials at Fortier point out, is that it spotlights trouble trends before they get out of hand and cause expensive delay time. For example, shortly after they instituted the unit numbering system, officials and floor personnel at Fortier noticed that fuel pumps rebuilt by the maintenance department were not holding up well.

With the records to prove that it was the shop rebuilds which were giving trouble, it was a comparatively simple process then to run down the trouble, which was found to be primarily dust. Solution: a dust proof room was built and all fuel pumps are now rebuilt in this room and stored there. Before this change in maintenance procedure, Fortier had been happy to get 80,000 miles on their fuel pumps between overhauls—now they get 150,000 miles.

More Flexibility

There are also many less obvious, but nonetheless important advantages, Fortier officials declare. Such fingertip control allows more flexibility in maintenance policy because it's possible to keep right on top of trouble instead of having it hit you all at once. It saves time on road calls, as well as cutting them sharply (Fortier road calls dropped 80 per cent during the past two (TURN TO PAGE 136, PLEASE)

third gear went out. An additional note made at this time tells us that it was discovered the teeth were broken off, and since this indicates either abnormal road conditions or poor driver practice as a rule, it was called to the attention of the road foreman for checking. This happened on 12-16-52, and the record shows that the unit was repaired and replaced in the same vehicle. On 5-17-53, MT 215 was removed from vehicle 2257 and put into 2263 on 5-29-53. Reason for removal: Main shaft rear bearing. And so the record goes, right down to 9-4-54, when MT 215 went into vehicle 2260, after having two bearings replaced.

Note that repetitive repairs show up immediately, and while this is not a typical example and

certainly not typical of the unit use Fortier normally gets, it does illustrate how accurate a record is possible with the unit record system as compared to the vehicle numbering only system.

Records like this that allowed Fortier to discover that their carrier bearings were going out at about 65,000 miles in one particular type rear end. Once this was discovered, they immediately set about trying to do something about it, and eventually found that by substituting a different carrier bearing in this unit (different, that is, from that which the manufacturer was using) they could double the life of the unit.

Spotlight Trouble Trends

Another advantage to the unit

Fleet superintendents' headaches aren't always connected with vehicle maintenance. Here are some interesting problems faced by Florida Power & Light's fleet boss Henry Allen . . . and how he solved them

Florida Utility Designs for Spe

V MOST UTILITY men know Henry Allen, Superintendent of Automotive Equipment for Florida Power & Light Co., as the man who farms out all his maintenance. But there appears to be logical reasoning behind his decision.

Most of the sprawling Miami based fleet is scattered far and wide throughout southeastern Florida. He's getting good service from contract maintenance agreements throughout the area. Most of the lighter equipment is traded

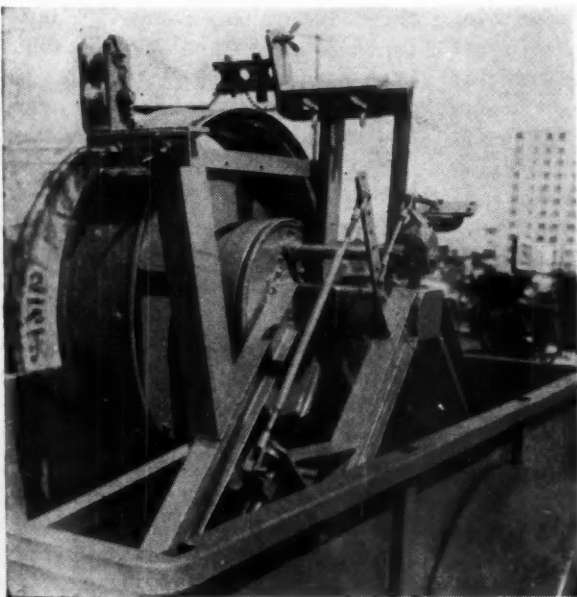
often enough to avoid major repairs, and maintenance cost appears in line with similar operations in other locations.

Special Designs

Instead, Allen spends much of his time working up original designs to meet the special requirements of his particular operation. Even a quick swing through company headquarters reveals many intriguing pieces of equipment and a full description would require an entire issue of CCJ.

The list runs the gamut from special air or water jetting equipment for setting poles in the sand and muck that cover much of the area to a huge LaTourneau four-wheel drive rig especially designed to hoist a pair of high-tension towers in place at a single wallop.

Impossible to describe them all, we have picked five briefly described on these pages and the following page, which we believe will be of interest both to utility operators and others engaged in specialized activities.



1. Cable Tension Brake

Problem

To provide tension brake for heavy power cable. This is necessary to reduce sag when pulling a new line through so that it does not fall on existing lines or other equipment.

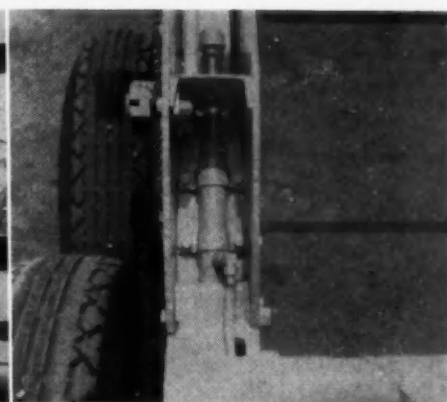
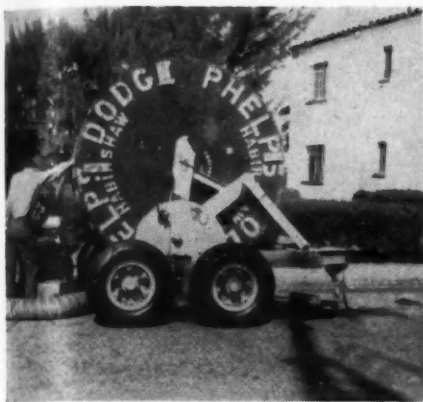
Solution

A rubber covered 48-in. diameter reel fitted with a standard trailer brake and four-inch wide brake block. Power cable enters through guides shown at top of photo, makes one complete turn around drum and leaves by similar guides on the opposite corner. The cable actually contacts the drums for only 355 deg, which automatically eliminates possibility of overlap and resultant binding. Standard trailer brake cam and activating mechanism is used including, at first, the air brake chamber. However, a hand wheel with worm screw slack adjuster is now used to provide much more accurate control.

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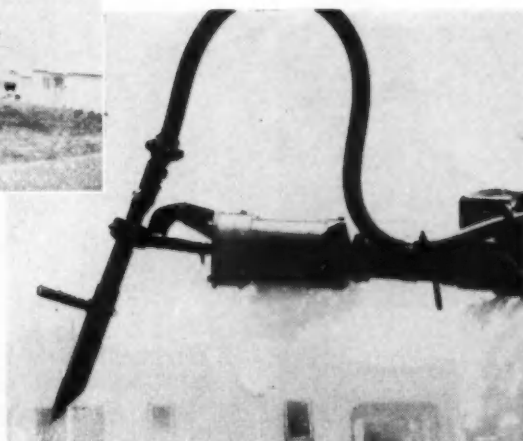
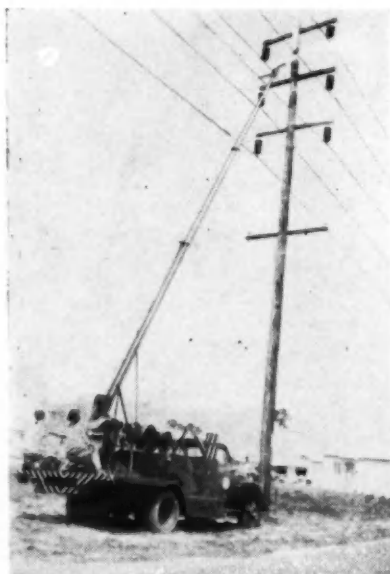
2. Self-Loading Cable Dolly

Problem

To provide self-loading trailer dolly for 20,000-lb cable reel measuring 62 in. in width, 104 in. in diameter; total width not to exceed 96 in. Weight is obviously too much for standard single axle dolly—tandem units normally are not self-loading.

Solution

The four-wheel trailer illustrated above left. It features a single tubular underslung axle with walking beam ends, above center. Giant V-shaped sling provides pivot for shaft through reel and sling attachment for cable to truck winch. Loading is accomplished by winching the load slightly over center. Unloading is the reverse process using the winch for a brake but two hydraulic pistons, above right, are required to lift the reel over center. The four 8.25x15, 14-ply nylon tires carry the 20,000-lb load.



3. Hydraulic Crane

Problem

To provide means of washing insulators on high voltage transmission lines which during the winter season become coated with dust and flying salt spray causing current leakage and resultant troubles.

Solution

A 45-ft telescoping hydraulic crane, above, fitted with high pressure nozzle equipped with controls for both vertical and lateral movement. The remote control of the nozzle is accomplished by a planetary gear arrangement for 360-deg rotation. Elevation is through a bevel gear,

cam and articulated rod with a movement of 70 deg. This control head, above left, is actuated by means of three sections of square tubing that telescope within each other along the boom itself. A bevel gear arrangement at the bottom together with a hand wheel and lever provide positive control.

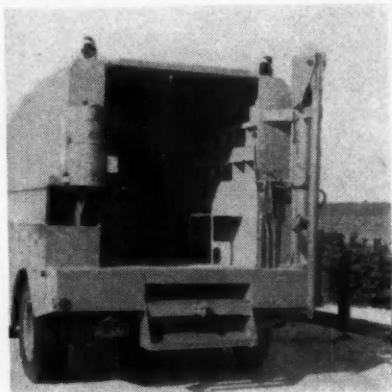
Water is supplied from a 1000 - gal tank on the truck

and a 100-gal per minute centrifugal pump powered by a six-cylinder industrial engine. Three-quarter inch high pressure hose runs up the outside of the telescoping crane to the nozzle.

More on next page ►

Special Utility Designs

Continued from Page 81



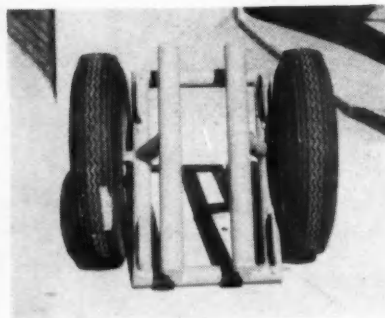
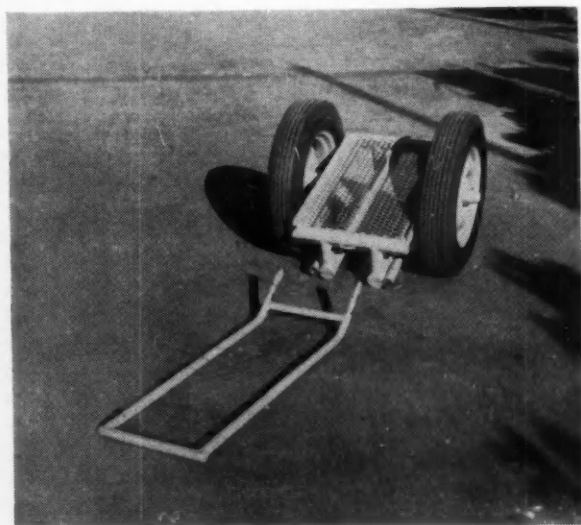
4. Hydraulic Lift

Problem

To provide convenient one-man hoist for 1000-lb drip pots and underground pipe. Must have lift range of at least nine feet (four feet above ground to five feet underground).

Solution

The hydraulic lift illustrated. It folds compactly against rear of truck body, above. Hydraulic cylinder is coupled in down position, above right, provides vertical lift of 10 ft, right, requires no cables other than the sling, is much faster than winch operation, can be handled easily by one man. It even has two-way hydraulic cylinder for power lateral swing. All controls are standard for dump body or power-operated tail gate construction, hence available in the field.



5. Pole and Transformer Dolly

Problem

To provide a light weight combination pole and transformer dolly for use over soft sand and private lawns.

Solution

This compact tubular steel dolly (at left) which weighs only 140 lb including the 6.70x15 tires. In position shown it's ready for transformer. Upside down it cradles pole. Stub axles are fitted with passenger car spindles and wheels.

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COMMERCIAL C

Two-Day College Refresher Course

Gives Fleetmen New Perspective

By Jack Colgan

Assistant Editor
Commercial Car Journal

Free from pressures of routine operations, fleet operators find mutual discussion a good way to solve their problems as this "inside" report from Penn State shows

AT PENNSYLVANIA State University last month, I sat in with a class of 34 experienced fleetmen while they absorbed and contributed to two days of fact-filled sessions on problems and methods of efficient fleet operation under the direction of Professor Amos E. Neyhart, Administrative Head of the University's Institute of Public Safety.

Labelled as a "Refresher Conference" for motor fleet personnel, the course is a part of the program of the National Advisory Committee for Motor Fleet Supervisor Training. Unlike other courses in this program, currently being conducted at colleges and in cities across the country, the Penn State conference was not limited to any specific phase of fleet operation, such as maintenance or accident prevention. Rather, it was of a general nature, with provision for the fleetmen attending it to specify the problems they wanted to cover.

The "students" were practical fleet management personnel. Among them they had a combined total of approximately 400 years experience in the trucking industry. As truck line owners, managers, superintendents or supervisors they had to have a working knowledge of such matters as driver supervision, vehicle maintenance, public relations



and accident prevention in order to hold their jobs. As a result, it's unlikely that any of them expected to find much new material presented to them in the course. Yet there they were in the class. And at the end of the course there was general agreement that the time had been well spent.

Why?

There are several possible answers. But the main reason is that you complete a course of this type

with a fresh outlook. Free from the pressures of your regular job, in the relaxing atmosphere of a college campus, you see old problems in a new light. You go back to basic theories; perhaps you add some new ideas, recall old ones that had lodged in the back of your mind. You see how these theories can be applied to your own practical problems; and you trade problems and solutions with the other fleetmen who make up the class.

Problems

While we can't cover all the material discussed during the two-day session, we can present the highlights of some of the discussions in which there was particular interest. One of these was the opening period in which the class was divided in groups, with each group instructed to decide on a specific problem and develop some suggested solutions to it.

Based on in-class notes, here are some of the problems and a summary of the solutions:

1. How do you establish an effective traffic accident prevention program?

Solution: Set up a program based on accepted methods of driver selection, training and supervision.

(TURN TO PAGE 158, PLEASE)

New PRODUCTS

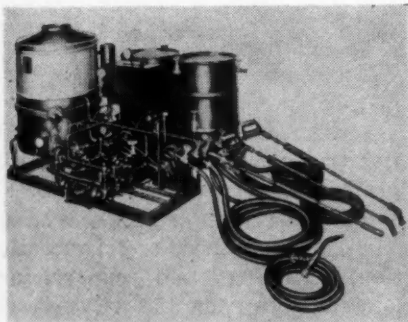
The latest developments in parts, accessories, tools and equipment for the fleet field, described in brief for your convenience

P1. Shop Lift

Allied Mfg. & Sales Co., Chicago, announces a new 4-speed hydraulic "Varilift" to save time and manpower. This is a combination pallet-lift stacker and hand truck capable of lifting a quarter ton, moving loads with perfect balance and stacking from floor level to 36 or 54 in. It handles heavy motors, vehicle components and assemblies.

P2. Steam Cleaner

Clayton Mfg. Co., El Monte, Cal., announces the availability of a 600-gph steam cleaning and 500-gph high pressure rinse machine, employed exclusively for many years by the Armed Forces for heavy-duty cleaning purposes. The machine, in a one-nozzle operation, delivers 600 gph of vapor cleaning solution. For two nozzles, it puts out 300 gph per nozzle and in 3-nozzle operation it delivers 200 gph out of each. The fourth nozzle on the machine is for rinsing with a capacity of 500 gph, hot or cold water, at 300 psi. It may be operated at 400 or 200 gph with consequent savings in fuel, power and water. Two models are available, one gas fired and the other oil.

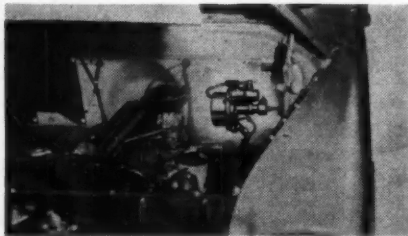


P3. Mobile Radio

Engineering Products Division, Radio Corp. of America, Camden, N. J., has placed on the market new two-way radio equipment, for operation in the 450-470 megacycle band. Known as Carfone-450, the new equipment includes a 15-watt mobile FM radio, for installation in cars, trucks and other vehicles, and a 15-watt FM station-desk mount, for base station operations. Both carry FCC Type approval for use in the Class A Citizens Band Radio Service. The new equipment features sectionalized chassis construction, with transmitter, receiver, and power supply designed as separate independent units and assembled in a single case. This separation permits change of units for maintenance.

P4. Power Brake

Bendix Products, South Bend, Ind., has just introduced a new power brake adaptable for all $\frac{1}{2}$, $\frac{3}{4}$ and 1-ton models. There is a unit especially designed for GMC, Chevrolet, Dodge, International Harvester and Ford. These new power brakes are all mounted "under the hood." Installation techniques incorporate preformed, prefabricated all steel tubing. The mechanic can make a power brake installation on any light truck in less than 45 min, says Bendix.

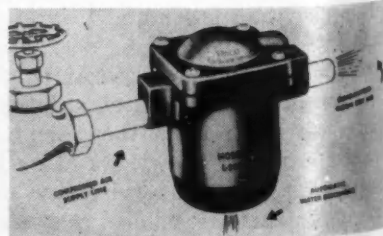


P5. Masking Machine

Permacel Tape Corp., New Brunswick, N. J., announces a new lightweight portable masking machine. The new masker measures 13 x 9 x 8 $\frac{1}{2}$ in., weighs 7 $\frac{1}{2}$ lb without tape or paper, dispenses either a 3 or 6-in. width of masking paper with masking tape in widths of $\frac{1}{2}$ to 1 in. aligned along one edge.

P6. Air Line Filter

EMCO Pneumatic Division, Engman Mfg. Co., Des Moines, Iowa, has announced availability of a new fully automatic air filter. The compact unit weighs 28 oz, is equipped with an automatic discharge to eliminate hand draining. As the air flows through the unit, water and foreign substances with specific gravity greater than air collect in the main filter chamber of the unit. Upon the sudden stoppage of this air flow, an internal valve changes position. During this brief instant, the full line pressure purges through the opening at the bottom of the separator all collected water and foreign substances. This sequence is repeated each time the air is released and stopped at the point of use. The air filter operates efficiently on all air pressures from 20 to 175 lb. Overall size is 2 $\frac{1}{2}$ x 3 $\frac{1}{2}$ x 3 $\frac{3}{4}$ in. Size inlet and outlet are $\frac{1}{4}$ -in. pipe.



P7. Wreck

Ernest Ho Tenn., announces boom attachment standard double used on numerous jobs. L installing materials and lifting of sign

P8. Fender

Buxbaum C introducing new fender flaps Strength and achieved by in completely w features three of the flap.

P9. Tandem

Hutchens & Inc., announce ferred on the H dem suspension one bolt, a six-ply of lubricant reservoir inside rubber "O" r machined groove diameter of the ameter of the l ing. This give hold oil inside needed, oil pas through a hole

P10. Sliding

Truk-A-Door ducing a sec door. This ne comes in section depends on he are quickly a strong efficient optional equip and for replac lows the truck up against the driver first op 6 $\frac{1}{2}$ in. of h Should load sh will still open panels.



P7. Wrecker Boom

Ernest Holmes Co., Chattanooga, Tenn., announces a new adjustable boom attachment that enables the standard double boom wrecker to be used on numerous types of commercial jobs. Loading, unloading and installing of all kinds of building materials and industrial equipment; lifting of signs, girders, pipe, etc.

P8. Fender Flaps

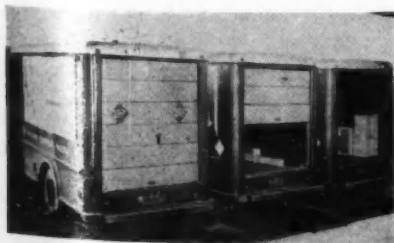
Buxbaum Co., Canton, Ohio, is introducing new impregnated "Akro" fender flaps for trucks and trailers. Strength and durability have been achieved by impregnating the rubber completely with cord. Fender flap features three air vents at the top of the flap.

P9. Tandem Equalizer

Hutchens & Son Metal Products, Inc., announces a new equalizer, offered on the Hutchens No. H-200 tandem suspension unit. By removing one bolt, a six-months to one-year supply of lubricant can be put in the oil reservoir inside the equalizer pin. A rubber "O" ring fits securely in a machined groove around the outside diameter of the pin and the inside diameter of the heavy-duty bronze bushing. This gives an airtight seal to hold oil inside the lubricated area. As needed, oil passes from the reservoir through a hole to the lubricated area.

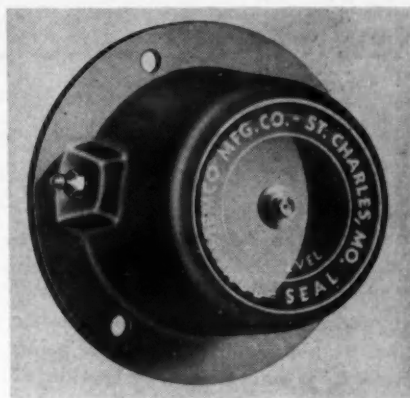
P10. Sliding Truck Door

Truk-A-Door Co., Detroit, is producing a sectional upward sliding door. This new easy opening door comes in sections (number of sections depends on height of opening) that are quickly assembled to make a strong efficient unit. It is available as optional equipment on new vehicles and for replacement purposes. It allows the truck or trailer to be backed up against the platform without the driver first opening the doors. Only 6½ in. of headroom is required. Should load shift against the door it will still open due to flexibility of panels.



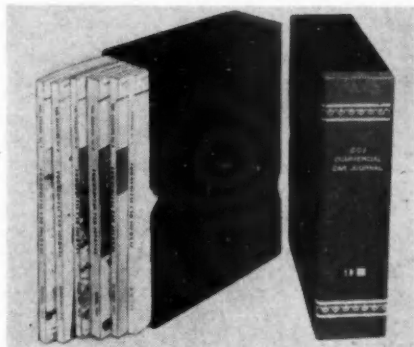
P11. Grease Fittings

E. Edlmann & Co., Chicago, is now marketing a new line of grease fittings under the trade name "Leak-Not." Among the features are: a "tip seal" that keeps out dirt, preventing damage to bearings; and "precision-erced" springs that give easy retraction under pressure. Larger diameter passages have also been designed into the fittings to permit faster grease flow, thereby cutting lubrication time. Grease fittings have a new-type head design for easier locking.



P12. Magazine File

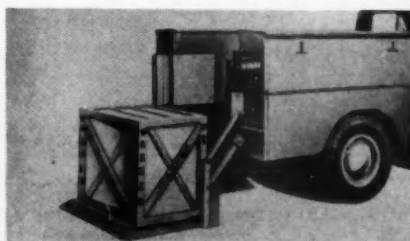
Especially designed to hold 6 full issues of COMMERCIAL CAR JOURNAL, these file boxes will keep them clean



but readily available for immediate use. They are made of heavy binder board especially reinforced, have been tested up to 150 lb. They are covered in washable, red and black "Kivar." Each is stamped on the back in 16 carat gold leaf with the name of the magazine and space to write the year.

P13. End Loader

Galion Allsteel Body Co., Galion, Ohio, announces a new hydraulic end loader of 600 lb capacity, designed for mounting with pickup, service or express bodies on ½ to 1-ton trucks. Known as Model No. G 60 E "LOAD-evator," the new end loader is electrically powered by the truck's battery, can be mounted on any truck regardless of transmission type, is operated by two hydraulic cylinders.



P14. Trailer Hub Seal

Stemco Mfg. Co., St. Charles, Mo., is producing a hub seal for trailer axles. The assembly comes with a full-view cap, illustrated above, permitting visible inspection of the lubricant level. This unit offers the opportunity to adapt to trailer wheels the principle of sealing lubricants on a shaft. Stemco recommends use of hypoid or multi-purpose lube SAE 90, 120 or 140 weight with the unit.

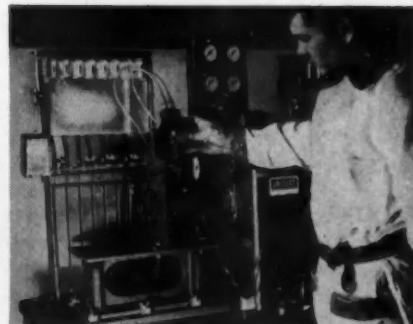
P15. Transmission Gaskets

The S. K. Wellman Co., Bedford, Ohio, announces a complete line of "Velvetouch" automatic transmission gasket sets for all passenger cars and light trucks. Available in single sets and combinations, the single sets contain all the replacement gaskets needed to complete a transmission rebuilding job on a specific make and model of car or truck, while the combination sets will accommodate any one of several jobs having the same type of transmission.

P16. Diesel Test Stand

Diesel Control Corp., Wilmington, Cal., announces that their "Unitest" diesel test stands for Bosch fuel pumps are now available with adapter bases permitting the testing of Cummins PT, BB and H pumps, General Motors Series 71, International, Caterpillar and Demco pumps. The

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New Product Descriptions

Continued from Page 85

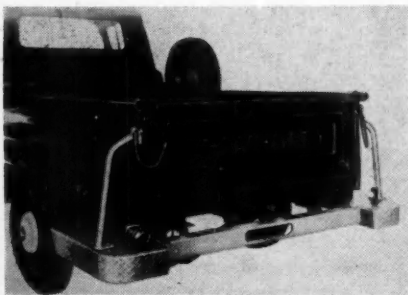
"Unitest" stands include fuel heating equipment necessary for the calibrating of Cummins PT pumps, variable speed drive to simulate all speed ranges, pump stroke counter, plastic lines to and from the pump being tested to permit visual inspection of oil flow, electric driven priming pump.

P17. Bar Clamp

Grand Specialties Co., Chicago, announces its new, versatile "Quickcet" bar clamp for welders and machine tool shops. It is designed to firmly hold small or large objects formerly too bulky to handle. This heavy-duty ¾-in. pipe bar clamp with sliding jaw for quick adjustments can be used either vertically or horizontally. It has been tested to 4500 lb and has a 15-in. opening capacity with its standard 12-in. pipe bar, however extra bar extensions of any length can be furnished.

P18. Tail Gate Bumper

Lemco Products, Inc., Bedford, Ohio, announces a new heavy-duty tail-gate bumper for pick-up trucks. The new models are furnished complete with side step-up platforms for easy loading and unloading and a re-



cessed trailer hitch which allows tail-gate to be dropped straight down. Tail gate is protected from damage by rugged side bumperettes. Heavy side braces are also available to reinforce pick-up box when tail gate is down and to insure snug fit of tail gate at all times.

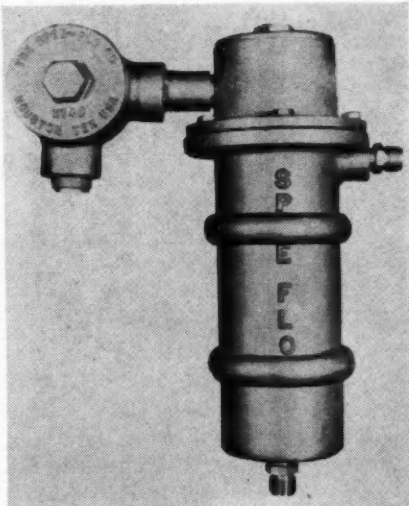
P19. Graphited Oils

Pyroil Co., La Crosse, Wis., has placed on the market two new products known as Pyroil "M" Multipurpose Lubricant and Pyroil "P" Penetrating Oil. Both are packed in snout-

type 3-oz cans. Pyroil "M" is a graphited, multipurpose lubricant which gives lubrication, protection against rust and corrosion, and leaves a polished finish. Pyroil "P" is a penetrating oil which dissolves rust and loosens corroded parts. Its graphited oil base gives it lubricating qualities and the ability to eliminate squeaks.

P20. Spray Paint Air Drier

Spee-Flo Corp., Houston, Tex., now has in production its "Spee-Flo Dry-Air." The unit creates an air tem-



perature increase which evaporates moisture and assures bone dry air at the spray gun. The unit operates on the principle of an air temperature increase above the last water condensate point. The "DryAir" has a 1000-watt, 115-volt heating unit which is factory preset to deliver clean dry air at a volume of up to 30 cfm.

P21. Multi-Purpose Oil

L. Sonneborn Sons, Inc., New York City, has announced "Amalie 1-2-3," a new Pennsylvania motor oil recommended for use in gasoline-powered automotive engines under all service and weather conditions. It is recommended where SAE 10W, 20-20W or 30 is indicated, and for API Services ML, MM, MS and DG.

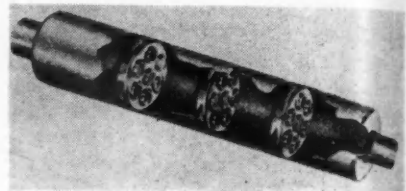
P22. Neoprene Solvent

Ansul Chemical Co., Marinette, Wis., announces a new polyglycol ether, known as Ansul Ether 181. It

may be the answer to industry's need for a solvent to remove neoprene compounds quickly and efficiently. With Ansul 181, the user merely mixes a paste and applies it to the neoprene. After two hours, the mixture and the neoprene compound practically fall off.

P23. Heavy Duty Mufflers

V. N. Holderman, Columbus, Ohio, is now manufacturing Teck heavy-duty mufflers for trucks, buses and



diesels. They now offer a baffle design to provide protection against objectionable exhaust noises without building up back pressure. Large extrusion-stamped portholes are scientifically sized and positioned for maximum efficiency. The large holes prevent clogging with carbon soot. An advantage is the hot dip galvanizing process inside and outside after fabrication.

P24. Hydraulic End Loader

Galion Allsteel Body Co., Galion, Ohio, announces two new hydraulic end loaders of 2000 to 3000-lb capacity, suitable for use on 1½ ton or larger trucks and trailers with van, platform and stake bodies. The new end loaders, known as Model Nos. G 2000 and G 3000, feature hydraulic opening and closing, single lever control of raising and lowering and compact design for easy installation on any truck or trailer. Model No. G 2000 is operated by a single hydraulic cylinder mounted up between the truck frame rails. Power is supplied by a rear mounted gear-type pump driven by the truck's power take-off. Model No. 3000 is fitted with a lifting cylinder of 50 per cent greater capacity.

P25. Rear Power Source

The H. S. Watson Co., Emeryville, Cal., has announced a new rear power source and a new line of truck-powered tools designed to increase the usefulness of pick-up trucks. Available in kit form, it is adaptable to most light and medium-duty trucks. Watson's rear power source terminates in a standard spline. Available

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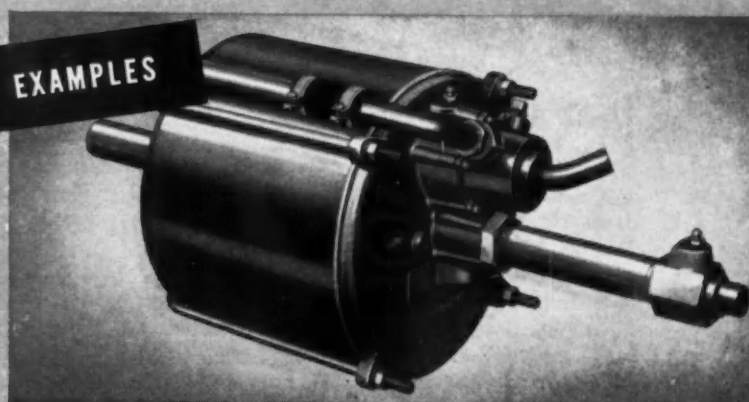
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From four wheel brakes to the latest development in power braking, Bendix Products Division has demonstrated its unique ability not only to keep pace but *actually to anticipate* the industry's requirements for the latest and most efficient in automotive components.

TYPICAL EXAMPLES



BENDIX LINKAGE TYPE POWER STEERING—Because Bendix* Power Steering is of the linkage type, manufacturers find it specially adaptable for production line installation without extensive engineering changes. Manufacturers can now meet the increasing demand for power steering more efficiently and economically with Bendix Linkage Type Power Steering.

BENDIX HYDROVAC POWER BRAKE—With over four million in use, the Bendix Hydrovac* is the world's most widely used power brake for commercial vehicles. This overwhelming preference for Hydrovac is a result of sound engineering design, exceptional performance, low original cost and minimum service upkeep. Make the industry's choice your choice.

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Fleetman's LIBRARY

For free publications included in this list of new fleet maintenance and safety literature, use the reader service postcard

Electrical Wiring Manual

Since even the lightest trucks have at least 250 ft of electrical wiring, this handy manual on vehicle re-wiring will be of value to most all fleet shops. It is a pocket-size, 50-page booklet published by Packard Electric Division, General Motors Corp.

It presents a thorough review of the automotive electrical system with emphasis on what to look for in checking wire and cable. It starts with a discussion of the battery—testing, battery cables, etc., reviews the starting motor, all parts of the primary and secondary ignition circuit, the lighting circuits, and includes special sections on the generator and voltage regulator.

There are special sections on how to determine the right wire and cable size. They explain the electrical characteristics that make a certain size necessary. Over 60 illustrations make this an easily understood manual. For your free copy, circle L1 on the postcard on page 84.

Truck Tire Service Tips

Here is a file-size booklet to help you get more tire mileage. It is a fully-illustrated trouble shooting guide made available by Lee Tire & Rubber Co. and compiled by the Rubber Manufacturers Assn.

It is divided into 10 sections; overloads, overinflation, underinflation, excessive heat, abnormal tread wear, careful driving, matching of duals and rotation, rim selection, tubes and tire safety. Each of these divisions describes what to look for, what effect the particular abuse has on the tire and what to do about it. Each section has several pictures of actual tires that clearly show the problem being discussed. For your free copy, circle L2 on the postcard on page 84.

Wheel Bearing Lube Procedure

This step-by-step procedure entitled "Recommended Practices for Lubricating Automotive Front Wheel Bearings" has been in preparation for three years. It was developed with the cooperation of more than 250 auto-

motive and oil industry experts by the National Lubricating Grease Institute.

It is a 15-page booklet that breaks down into 42 easy steps recommended procedure for disassembling, cleaning, relubricating and adjusting truck and passenger car front wheel bearings.

Copies are available at 15¢ each from National Lubricating Grease Institute, 4638 J. C. Nichols Parkway, Kansas City 12, Mo.

American Trucking Assns. Report

For-hire and private carriers are both faced with legislative and regulatory problems and stumbling blocks. This report by John V. Lawrence, managing director, American Trucking Assns., explains in this report how ATA has represented the trucking industry.

Lawrence reviews some of the growth problems in the industry and the lack of unity and support in some cases resulting from trucking's rapid expansion in that 21 years. His comments as to how these defects can be overcome are worth reading if you are concerned about possible future excessive taxation, legislation and regulation. A free copy of this pertinent comment is available by circling L3 on the postcard on page 84.

Tubeless Tire Instruction Booklet

Tubeless tires are here for lighter trucks, are coming for the heavier ones. While not necessarily more difficult to handle than tires with tubes, they do require changes in tire maintenance procedures. For this reason, you should be interested in this tubeless tire instruction booklet just published by Armstrong Rubber Co.

It opens with a discussion of procedures for mounting and demounting tubeless tires including sections on valves, tire beads, application to rim, inflation, testing, loosening beads and removal. Following this is a discussion of care of tubeless tires, including leak trouble shooting, rim maintenance, carcass breaks and recapping and retreading. Circle L4 on the postcard on page 84 for your free copy of this illustrated booklet on tubeless tire care.

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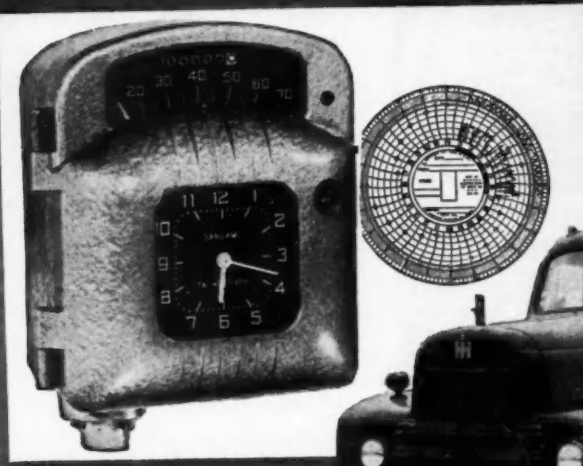
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"Tachographs

... have helped protect our drivers,
equipment and cargo for 10 years"

says: **C. H. CRUTCHER, Operating Manager**
HEALZER CARTAGE COMPANY, Kansas City, Missouri

Safety-minded fleet operators like Mr. Crutcher of Healzer Cartage Company know that TACHOGRAPHS help maintain "on time" schedules, encourage good driving habits and cut down maintenance costs. Complete trip information is recorded by the TACHOGRAPH:

- When engine started
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- How fast it traveled
- When vehicle was in motion
- When it stopped—and for how long
- Distance traveled

TACHOGRAPHS connect directly to speedometer cables and are easily mounted on the dash at the most convenient position and angle for drivers. Easy-to-see, easy-to-read indicating dials show time of day, m.p.h. (or r.p.m.) and total mileage. All TACHOGRAPHS are equipped with a red signal light that flashes on to warn drivers when the maximum speed your company allows is exceeded.

You'll find full details in Wagner Bulletin SU-3. The coupon provided below will quickly bring you a free copy. Mail for yours today.



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6400 Plymouth Avenue
Saint Louis 14, Missouri
Gentlemen:

Each month our drivers log better than 620,000 miles throughout Kansas, Missouri, Illinois, and Wisconsin. With an operation of this size, the establishment of high safety standards and the encouragement of safe driving habits are important. This policy reflects in better hauling service to our customers.

All of our over-the-road tractors are equipped with Tachographs. They have helped protect our drivers, equipment and cargo for 10 years. The graphic recorded trip information Tachographs provide assists in determining schedules, checking performance and in recognizing good driver habits. Charts are kept on each truck for a period of 45 days so that we have a complete file that shows the efficiency of our current operation. Our drivers like Tachographs, too. They know that Tachographs guard them against false accusations whenever there is a question of traffic violation.

Tachographs have been a wise investment for us.

Sincerely yours,

C. H. Crutcher
C. H. Crutcher
Operating Manager

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YOU AND THE BUS ASSOCIATIONS



FACED WITH many serious problems, transit and intercity bus operators have strong, helpful working partners in their national associations, the American Transit Assn. and the National Assn. of Motor Bus Operators. In this, the seventh of a series of special COMMERCIAL CAR JOURNAL reports on organizations serving the highway transportation industry, the spotlight is focussed on ATA and NAMBO to highlight their activities and the services they offer to members.

UNLIKE SOME trade associations, both ATA and NAMBO include a high percentage of the companies in their industry among their membership. Members of ATA include the transit companies in almost every sizeable community in the United

States and Canada. In many small communities, approximately 80 percent of the transit traffic is handled by a few of its members. Each other and exchange operators have a similarly close relationship among the inter-

ALTHOUGH relatively small associations, their member activity in meetings is at a high level. Problems at local association activities are being treated on the national level. This co-

YOU AND NAMBO

▼ ACCORDING to a recent estimate, there are now some 2400 separate companies primarily engaged in providing intercity passenger bus service in the U. S. Ranging in size from multi-million dollar corporations to small localized operations, these companies have one thing in common: they are represented at national level by the National Assn. of Motor Bus Operators.

NAMBO was founded in 1926. Its stated purpose: to do everything possible to promote the safety, convenience and improvement of the passenger motor transportation business, and in general to do everything in its power to serve the interest and welfare of its members and of the public at large. Its membership is open to bus operators, to state associations of bus operators (14 state groups are affiliated with NAMBO) and to manufacturers, distributors and other persons and firms having an interest in motor carrier passenger transportation.

Advisory Services

If it accomplished nothing else, NAMBO's activity in keeping members informed on developments concerning their business would justify its existence. Through research and active cooperation with important government and private organizations, the staff develops a steady flow of material concerning technical operating problems, safety, labor relations, legislation, regulations, public relations and many other phases of the activities of its members. This

material is made available to members through bulletin series and in conferences, meetings and individual consultations.

The bulletin services are designed to serve a dual purpose: they provide current news of important developments with interpretations of their significance; and their format is such that they may be used as permanent, indexed reference files.

Current NAMBO bulletin services include:

Motor Carrier Regulation Service—A periodic report on operating rights developments, covering disposal of operators' applications, hearing schedules and ICC orders, reports and decisions.

Labor Relations Service—A regular monthly bulletin, with special "extras" when needed, covering NLRB decisions, policies, other labor news and labor statistics.

Statistical Service—A periodic summary and analysis of bus operation statistics, including an annual report covering Class I Intercity Carriers.

Legal and Legislative Bulletin—Monthly news reports and commentary on legal and regulatory developments affecting bus operators, including periodic summaries of legislation.

Collective Bargaining Manual—Foundation of the association's labor relations service, this manual supplies bus management men with exhaustive data on industry practice with respect to every important phase of wages and working conditions and on problems of bargaining. Special studies, made by NAMBO's staff, such as those on pensions and employee insurance, contain the only extensive specialized information available on these subjects.

In its role as national representative of the member companies of NAMBO, the association's staff maintains continuous friendly contact with private and

government. From these efforts, legislation is passed on other benefits, safety regulations, revisions to the Code of Federal Regulations, and the ICC. NAMBO's committee, made up of manufacturers, fully, and the ICC.

Legislative

The welfare of the other, dependent on which it must through its regulations and interpret united support the General. These appear on the Board of staff to asse-

At times, sult in additional panies. An Agreement of NAMBO Through this of military tr who were n-

States and Canada, as well as companies in many small towns. They transport approximately 80 per cent of the nation's transit traffic. ATA is also unique in that few of its members are competitive with each other and are thus able to freely exchange operating information. NAMBO has a similarly high percentage of members among the intercity properties.

ALTHOUGH OBTAINING members is a relatively small problem for both these associations, the problem of lack of member activity in association projects and meetings is at times serious. Faced with problems at home, members at times waive association activities in favor of concentrating on the local situation. While occasionally this can be justified, it can be a

serious error if it leads to a weakening of the association.

THERE ARE many similarities between ATA and NAMBO. Both were founded to meet the needs of their members for a unifying national organization. Both now act as the national voice of their members, representing them before government bodies and in national-level dealings with the public and the press. Each also offers its members a group of information and consulting services. Finally, through meetings and committee activities, both organizations provide a framework in which members can exchange ideas and experiences and take cooperative action.

WHILE THE activities of both these or-

ganizations primarily concern the bus industry, the accompanying articles should be of interest to all fleetmen, since many of the problems faced by transit and intercity bus operators are similar to those confronting truckers. All are faced with high costs, traffic congestion, labor relations, maintenance, and the need for public understanding. To these the passenger carriers have the added problem of lowered passenger levels. In the search for solutions to these problems, they find that their associations can often provide valuable assistance.

Next month, **COMMERCIAL CAR JOURNAL** goes back to school, with a special report on the activities of the National Committee for Motor Fleet Supervisor Training.

government organizations, departments and bureaus. From these contacts result much of the material which is passed on to members in the bulletin services, and other benefits frequently result. When, for example, safety regulations were to be revised, the proposed revisions were promptly furnished by the ICC to NAMBO for study by its Safety Committee. This committee, made up of representative operators and manufacturers, considered the proposed regulations fully, and stated the industry's views on them to the ICC.

Legislative Watchdog

The welfare of the intercity bus industry, like any other, depends heavily upon the federal laws under which it must operate. For this reason, NAMBO, through its General Counsel, closely screens proposed regulations in bills introduced in Congress, reports and interprets them for members and organizes either united support or opposition to them. Occasionally, the General Counsel appears before federal legislative bodies on matters affecting NAMBO members. In these appearances, he is guided by the advice of association members on the Legislative Committee and on the Board of Directors. In preparing factual testimony, he has the assistance of NAMBO's research staff to assemble and analyze necessary information.

At times, NAMBO's activities at national level result in additional business for individual bus companies. An example of this is the Joint Bus Military Agreement which resulted from the combined efforts of NAMBO and the National Bus Traffic Assn. Through this agreement a steadily increasing volume of military traffic was made available to bus operators who were members of the National Bus Military

Bureau. Similarly, through NAMBO's efforts, the Post Office Department has been alerted to the inherent advantages of intercity bus service in the transportation of mail. As a result, there has been an appreciable increase in the amount of first-class mail carried by bus. This has improved both the mail service and the revenues of the carriers involved.

Committed in its by-laws to promote adequate roads and highways, NAMBO maintains liaison and at times cooperates on National Committees with other organizations which have similar purposes. Through this close cooperation, NAMBO members are given the opportunity to combine efforts with these organizations on policy matters relating to research, planning, legislation, regulation and other activities in which it is essential that there be uniformity both in the interests of the affected groups and that of the general public.

Member Activity

In addition to staff activities, NAMBO offers bus operators an organization in which they can take cooperative action to solve mutual problems. Through the annual convention and a series of regional conferences, bus men have an opportunity to meet each other, exchange ideas and experiences. It also makes use of committees to handle specific problems or to consider specialized developments.

At the meetings, panel sessions on maintenance, labor, traffic, safety, public relations and many other phases of the business are lead by specialists from among the membership, by staff members, and by independent experts. In these sessions, bus men have access to authoritative advice and counsel, which is available for the asking.

YOU AND THE BUS ASSOCIATIONS

YOU AND

ATA

V CURRENTLY engaged in a battle for survival, the transit industry recently embarked on a program aimed at convincing communities and business men that cities need healthy transit systems to retain their role as centers of business.

Spearheading this program and helping to coordinate it is one of the important functions of the industry's national association, the American Transit Assn. Through intense effort at local level and an active Public Information program in cooperation with ATA, transit operators hope to stem the flow of passengers from transit vehicles to private automobiles, especially in the congested downtown sections of the communities they serve. The success or failure of these efforts can have an important effect not only on the local transit systems but on all commercial vehicle operators, since each additional passenger car using city streets contributes to the already serious traffic congestion problem. The ATA information program stresses the fact that planners can use transit constructively as a tool to break up traffic jams.

Many Activities

Contributing to better public understanding of transit's problems is, of course, only one of many functions of ATA. And it is doubtful that there are many transit men above the level of supervisor who are not familiar with at least one phase of the association's activities.

Like its members companies, ATA's organization is departmentalized along functional lines, with a system of Divisions corresponding to the companies' departments, and with standing and special committees and sub-committees to carry out special studies and projects.

Among special committees are those on Transit Pars, Zone Fares, Taxes, Personnel and Accident Prevention, Safety Awards, Labor Relations, Radio Communications for Dispatching, Bus Design, Public Liability Insurance, and Transit's Use of Streets and Highways.

Membership of the Divisions and committees is composed of representatives of member companies, working with full-time association staff members. Other members of the staff at the New York head-



quarters are engaged in compiling and issuing transit statistics and information to members and in cooperating with transit men in carrying out studies and solving specific problems. Guiding the over-all policies of the organization is an elected Board of Directors and Executive Committee.

Formally scheduled ATA activities consist of an annual convention and a series of regional conferences. Through these meetings, top management, department heads and technicians have an opportunity to exchange ideas, discuss mutual problems and hear experts discuss current developments.

Meetings are scheduled in different cities each time so that a maximum number of companies can benefit from them by having more of their personnel attend those that take place nearest to the cities in which they operate.

At present there are four types of regional conferences: Management, Divisional, Small Operations and Maintenance. Management conferences provide opportunities for top executives of member companies to discuss major industry developments and problems. Divisional meetings, which are probably the best known of ATA's activities to COMMERCIAL CAR JOURNAL readers, bring together department heads and technicians to consider new developments and techniques. These are generally outlined in prepared papers or discussions and demonstrations. Maintenance conferences are designed for representation of the maintenance department of member companies. They feature prepared and informal round-table discussions of the organizations, procedures and problems involved in the maintenance of medium and larger sized fleets. Maintenance of trolley coaches and trolley cars is also considered.

In the Small Operations conferences, representatives of smaller companies gather to discuss maintenance and operating problems peculiar to this type of operation. Conferences are conducted on an off-the-record, round-table basis, with very few, if any, prepared papers. Discussions of these sessions may at times cut across the other classes of conferences, but it has been found that the smaller companies benefit from decisions tailored to the particular needs of their type of operation.

Division Activities

Through its 10 Divisions, ATA provides a framework in which department heads and specialists may work together with others in similar jobs in other companies on specialized problems.

The present Divisions and the scope of their activities are:

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COMMERCIAL

ACCOUNTING — Accounting practices, standard classification of accounts, tax problems, punch card accounting, preservation of records and internal cost control.

CLAIMS—Claims investigation and settlement procedure, medico-legal aspects of claims, fraud and exaggeration in claims.

ELECTRICAL — Current collection equipment, power conversion and distribution, overhead line construction and maintenance, provision of information for the Power sections of the ATA Engineering Manual.

MANUFACTURER—This division serves as the agency by which transit equipment manufacturers are able to cooperate with transit operators on mutual problems; e.g. cooperation with the Mechanical Division on vehicle design and maintenance.

MECHANICAL—Design and maintenance of motor coaches, rail cars and trolley coaches; also responsible for providing sections on rolling stock in the ATA Engineering Manual.

OPERATIONS—Passenger vehicle design, employee selection and training, development of supervisors, scheduling, motor carrier safety regulations.

PUBLIC RELATIONS—Recommends industry public relations policies, community-level programs, consideration of preparation and use of annual reports, company magazines, "Take One" folders, other publications, advertising, publicity, motion pictures and other programs.

PURCHASES AND STORES—Inventory control, availability of materials, obsolescence, purchasing procedures, store room practices, materials price index, materials specifications.

SMALL OPERATIONS—Conducts special Small Operations studies and the meetings described previously.

PLANT and ENGINEERING—Garage and shop design, track construction, paving, handling of snow and ice conditions; provides Way and Structures section of the ATA Engineering manual.

Each division is headed by an Administrative Committee which receives its authority directly from the

Board of Directors and which is responsible for all activities coming within the division's scope. The meeting reports and other reports of studies conducted within the divisions are often reproduced as part of ATA's information service to members.

Information Services

As a service to its operating company members, the association acts as the clearing house for an extensive amount of transit information. This includes: bulletins on such subjects as wages and fares, statistical and labor information, library service, accident prevention information, research reports on route cost analysis, selection of vehicles and schedule making, traffic and city planning, training and traffic safety films, special questionnaire surveys and reports and papers on a variety of other subjects.

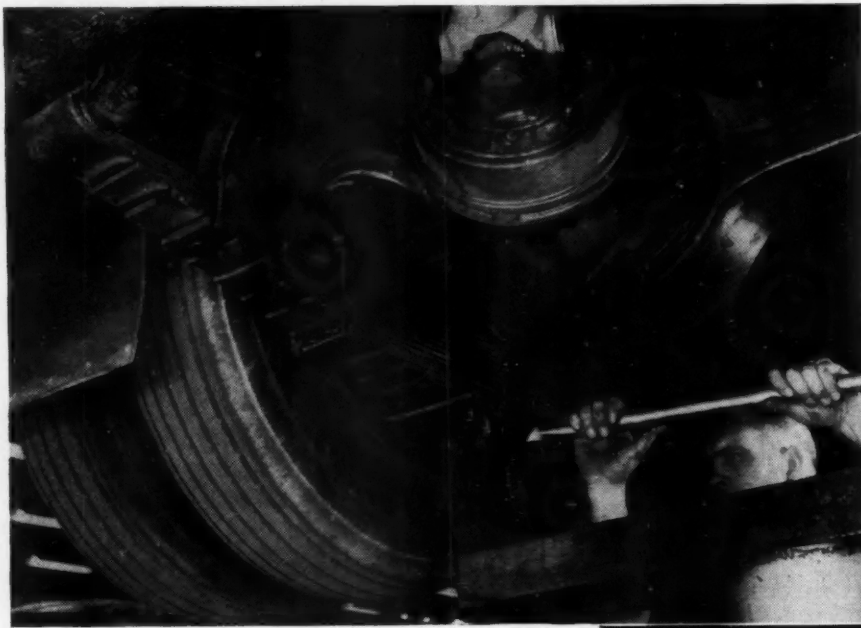
The ATA library, with more than 2000 volumes, contains the greatest collection of transit information in the world. When desired information is not already on file, a survey system is available to gather information from members by letter, telegram or telephone, and a staff of qualified experts are available on the headquarters staff for consultation. Among the staff consultation services are a labor advisory service, employee and supervisory selection, training and retraining service, and an advertising and public relations counseling service.

To keep members informed on current happenings, ATA publishes "Passenger Transport," a weekly newspaper with news and features on transit developments in the United States and Canada.

Government Relations

As the transit industry's national spokesman, ATA speaks for transit operators in appearances before government agencies and in dealings with the press on matters at industry level. In these activities, it has frequently been responsible for direct benefits to members. As an example: in 1954, ATA succeeded in obtaining a reversal of an Internal Revenue Service ruling which required transit companies to pay an excise tax on reconditioned or rebuilt automotive parts, even when these were used in the companies' own vehicles.

Federal agencies and bureaus like the Interstate Commerce Commission, the Internal Revenue Service, the Department of Commerce and the Federal Communications Commission accept ATA as spokesman for transit operators on matters that fall within their jurisdiction. During World War II, the association had a long record of cooperation with federal agencies.



Left. Most frequent cause of spring breakage is loose U-bolts. Below. Fleet repair should not be done more than twice, say experts



By Murray Fahnestock

Experts Tell

How to Up Spring Mileage

Leaf spring repair is profitable—to a point. Your operation determines at what mileage fatigue sets in. When it does, trouble looms

VTO MORE ACCURATELY determine when springs wear out, let's consider why springs wear out. Contrary to popular impression, the breakage of springs (if made of good steel) is not due to the "crystallization" of the metal, even though the broken surfaces of the steel may appear crystallized.

All good steel is born crystallized in the mill. The fracture merely exposes the crystals to

view. The size of the crystals may be changed during the heat treatment and tempering of the steel during the manufacture of the spring, but not during normal operating conditions on the vehicle.

The U. S. Bureau of Standards tells us there is practically no change in the crystalline structure of the steel while it is below the temperature of decalescence or cherry red.

A spring is a combination of bendable beams and most stress occurs on the top and bottom surfaces of the individual leaves. Since steel is stronger in compression than in tension, incipient cracks, which may result in fractures, are most apt to occur on the tension side of the leaf, and usually near the corners of the leaf.

Practically all spring failures are "progressive fractures." So, (TURN TO PAGE 122, PLEASE)



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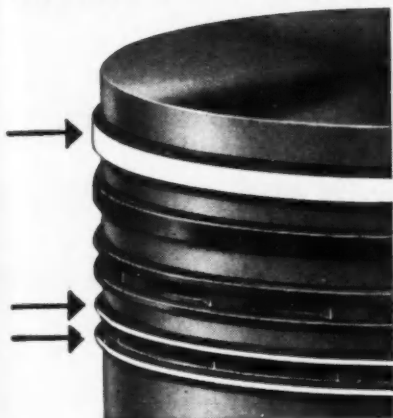


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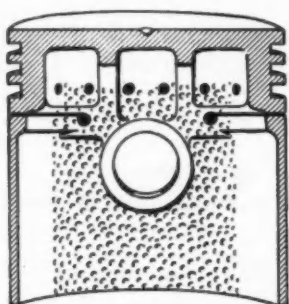


Maximum oil economy

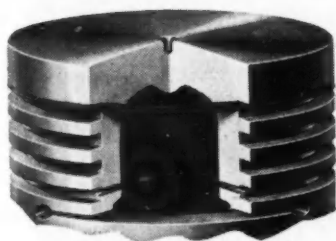
**EVERY RE-RING JOB
DESERVES ALL THREE...**



1. Kromex Ring Sets are the most economical, measured by miles. Factory-seated for instant oil control—chrome-faced top ring and oil ring side rails for longest wear.



2. Sealed Power SUPER-SIZER is the world's best resizing method, increases resiliency and outward tension on trust faces, expands skirt to original close fit, leaves piston skirt surface smooth.



3. Sealed Power GI-60 Groove Insert is the only dependable, economical method of restoring top groove to original size and protecting against future wear.



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- maximum oil economy
- faster pick-up
- smoother performance
- double ring life
- positive lubrication

assure YOURSELF

- lower cost per mile
- more miles of good service
- no come-backs



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BEST FOR RE-RING!

BEST FOR RE-BORE!

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June, 1955

ATA Spring Meeting of E and M

E and M Council, meeting in Minneapolis, presented a challenging program aimed at raising the maintenance standards of fleets across the nation

SOME 450 engineers and safety experts met last month in Minneapolis to take part in a four-day session of considerable interest to fleetmen. The event was the annual joint meeting of the Council of Safety Supervisors and the Equipment and Maintenance Council of the American Trucking Assns. The program itself was packed with papers and events affecting practically every member of the trucking industry—and the results will be measured for years to come in better maintenance and improved safety records of the participating fleets.

The E and M Council got a new lease on life when the Steering Committee delved into some of the problems affecting the organization's future. Plans and projects now under way will be more vigorously attacked in the future and the added vigor pledged by every member promises to whip this Council into an even more influential body, guiding equipment design and maintenance practices to practical solutions. (See Lew Kibbee's report on opposite page.)

The Maintenance Program

A three-man team looked into the runaway vehicle problem on Monday, when E. G. Cox, Section of Safety, Bureau of Motor Carriers of ICC pointed up the need for an emergency brake arrangement for controlling tractor semitrailers in event of failure of any one component in the system. John Thomas, chief engineer, International Harvester Co., gave a report on current AMA-TTMA Joint Brake Committee Activity and made recommendations for methods of controlling vehicles under all circumstances. Stephen Johnson, Jr., of Bendix Westinghouse

Air Brake Co., discussed various arrangements of brake components presently available to do this job.

The afternoon session reviewed the wind tunnel tests conducted by Trailmobile at the University of Maryland (see CCJ April, page 80 for complete details). Another session highlighted the tubeless

tire story, with W. R. Myers and G. A. Hudson, of Goodyear reviewing the advantages of this new development. (The reader is again referred to CCJ, May, page 70 for a rather extensive evaluation of this program.)

One of the highlights of the meeting was a truck marker light
(TURN TO PAGE 184, PLEASE)

Partners in Safety

HIGHLIGHT of the safety meeting was the kick off of the Partners in Safety campaign, sponsored by ATA and called one of the biggest coordinated safety campaigns in the history of the trucking industry. With over ¼ million truck drivers in over 1200 fleets enrolled at press time, the campaign will continue for the 101 days between Memorial Day and Labor Day, coinciding with the Slow Down and Live campaign sponsored by the governors of the 48 states.

The objectives of the Partners In Safety campaign are listed as follows:

"1. To promote greater safety in the industry and on the nation's highways.

"2. To cooperate with, and give active assistance to, enforcement agencies in their efforts.

"3. To demonstrate to the public our active interest in highway safety."

Fliers are being sent out now

to all of the state trucking associations which are members of American Trucking Associations, and these will be distributed through the state organizations to member truck-fleet owners—both of privately-operated and for-hire vehicles.

The fleet owners who wish to participate will order Partners In Safety campaign kits from ATA, including company pledges to place increased emphasis on safety during the summer months, an employees' bulletin board pledge roster, and driver's pledge cards, which each participating driver will carry with him while the campaign is in progress.

During the campaigns each participating company will keep a record of no-accident drivers, with those who make top records receiving a fleet citation certificate signed by Neil J. Curry, president of American Trucking Associations, and ATA Safety Director Goley D. Sontheimer.

M Council and Safety Supervisors

Lew Kibbee, secretary, reports on Council activities; sees new strength in the revitalized policies adopted by the Steering Committee last month

OUT OF what was once an apathetic and loosely organized council has been born a new and rejuvenated group that promises in time to become the largest and strongest council in the trucking industry. A new mission has been delineated and far-reaching goals have been devised for the group.

Whereas in the past, the Council did most of its work along equipment development lines, the emphasis now will be placed heavily on maintenance practices, standardization of maintenance procedures, and the development of forms. Although equipment development projects will remain an ever-important and ever-increasing segment of the Council's activities, maintenance activities, for the time being, will be given impetus and emphasis so as to reach a co-equal status with the equipment projects.

Credit for the renaissance of the E & M Council is clearly due to two individuals: Ray G. Atherton, General Manager of ATA, and Julius Gaussoin, president of Silver Eagle Co., Portland, Oregon, and a member of the ATA Executive Committee. Atherton, realizing that the Council was slowly degenerating due to the lack of a staff, membership and proper financing, called upon the Council Steering Committee for drastic action. He suggested and urged that the Council either be energized immediately or discontinue its existence.

The Steering Committee, at the annual May meeting, accepted the

challenge and the result we see today is an invigorated and enthusiastic Equipment and Maintenance Council.

Glory of the Grease

It was Julius Gaussoin, however, whose dramatic speech to the group on the "glory of the grease" set the future tenor and philosophy of the Council. He urged that the men in the grease pits—the men who repair and maintain equipment—should be given a say in the future development and improvement of equipment. In a strong plea to continue the equipment project activities of the Council, Mr. Gaussoin advised: "Let the other conferences and groups work at equipment problems, but have them clear through the E & M Council."

Consequently, the Council adopted a resolution which provides for sending E & M representatives to the meetings of other ATA groups handling equipment problems, in order to effect a closer liaison and to encourage those groups to refer their equipment and maintenance problems to the E & M Council.

Thus, the Council reestablished and reaffirmed its position as the clearing house within the ATA structure, and indeed, as the spokesman for the ATA on matters pertaining to equipment and maintenance.

An indication of the sincerity of the members in revitalizing the activities of the Council was the enthusiastic and unanimous re-

strengthening and refinancing of the group. At the instigation of the equipment manufacturers, the annual membership fee for associate members (manufacturers and purveyors of equipment, etc.) was raised to \$100 for the first company member, and \$10 for each company member thereafter. The motor carrier members of the Council reciprocated by raising their annual dues to \$25 for the first company member and \$10 for each affiliate member thereafter.

Concomitant upon the refinancing, the Council decided to employ the services of a full-time staff secretary to conduct a large scale membership campaign, and to step up promotional activities.

The Council at Work

At the present time, the Equipment and Maintenance Council has a comprehensive and active program of working committees in the fields of kingpins and fifth wheels, truck lighting, licenses and identification, truck brake hose and electric holding devices, hubodometers, road failures, full trailer chains, and new developments.

In the recent past, the Council has achieved several accomplishments of which it can be justly proud. It standardized and recommended for use, an electric coupler which is rapidly being adopted by the trucking industry; drafted standards for a leased vehicle name plate; instigated research on truck muffler noise which eventually brought about a standardized noise level on all new trucks; resolved the dispute on front wheel brakes; and promoted the trucking industry point of view on the Interstate Commerce Commission's safety regulations.

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the ultimate in cab-over-engine design

Now—you can get all the benefits that cab-over-engine design has always promised . . . but never before fully achieved! The moment you meet these new Mack D Series cab-forward trucks and tractors, you'll realize how far ahead they are in compactness, maneuverability, and accessibility. That means you benefit from increased load capacity . . . shorter turning radius . . . ease of maintenance which shortens every inspection and servicing operation. And you'll applaud their trim, taut lines,

combining modern good looks with money-making practicality.

Moreover, when you take a good, deep-down look, you'll see that they embody the familiar Mack construction, providing strength without structural makeshifts, assuring the same traditional reliability and long economical life that have made Macks the choice for even the most demanding operations, the toughest working conditions.

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COMMERCIAL CAR JOURNAL, June, 1955

MAC GIV

Fast-acting
Lift cab is
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ee... and you'll agree

GOT IT!

MACK'S NEW VERTI-LIFT CAB GIVES YEARS AHEAD DESIGN!

Fast-acting and safe to operate, the D Series Verti-Lift cab is raised *straight up* and securely locked *in seconds* by means of a hydraulic hand pump or optional electric-hydraulic motor. Full exposure of front of chassis, engine and all accessories is quickly accomplished without disconnections of any kind. No other "cab-overs" give such easy and complete accessibility.

ONLY MACK CAB-FORWARD DESIGN BEST FILLS ALL 10 BASIC "CAB-OVER" REQUIREMENTS

- UTMOST COMPACTNESS
- GREATER MANEUVERABILITY
- MAXIMUM PAYLOADS
- UNEXCELLED VISION
- DRIVER COMFORT
- LOW MAINTENANCE COSTS
- COMPLETE ACCESSIBILITY
- ADAPTABILITY
- RELIABILITY AND ECONOMY
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Strong claims? Not when you get first-hand proof! See the new D Series at your Mack branch or distributor, or write for descriptive literature. Mack Trucks, Empire State Building, New York

Available as straight truck from 20,000 to 28,000 pounds G.V.W. or as tractor in the 40-53,000 pound G.C.W. range.



68" FROM BUMPER TO BACK OF CAB-LIFT

COMMERCIAL CAR JOURNAL, June, 1955

New White Tractor Measures 90 in. Bumper-to-Back-of-Cab

NEW TRACTORS with 90-in. front-of-bumper-to-back-of-cab dimension have been announced by The White Motor Co., Cleveland, Ohio. They are designated as the 9000 TD series.

The new series is powered by the Cummins JT6B diesel engine. This engine is turbo-charged and uses the new Cummins PT fuel injection system. It is a 401 cu in. engine with 175 hp at 2500 rpm.

To get the diesel engine into shorter hood space, the front of the frame was lowered 7¼ in. and tilted. The lower center of gravity improves vehicle balance, steering and riding.

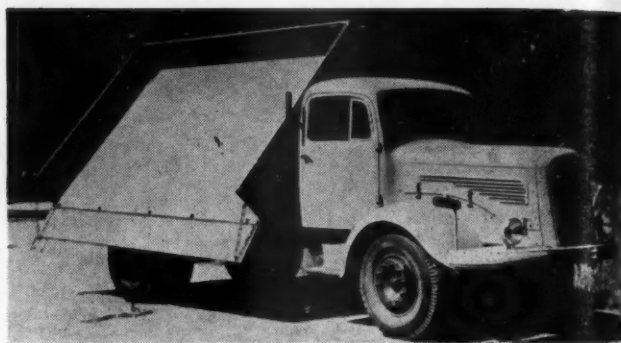
The 90-inch dimension from front-of-bumper-to-back-of-cab permits the use of 35-ft "high-cube" trailers within a 45-ft overall length limit. The tractor also features lightweight design to reduce chassis weight and increase payload potential. Aluminum is used in fuel tanks, radiator shell, bumper, hood and crosswalk.

A larger, wide-angle windshield and shorter hood give excellent visibility for the driver. Improved steering also helps the driver, through the introduction of a unique new steering system. A new grouping of instruments improves the driver view. Longer front spring suspension, a new, quieter, over-sized muffler, 12-volt starting and lighting system, a four-way bucket seat and more efficient cab heating and ventilating system are also featured.

Shown below is one of an order of 140 of these new tractors delivered to Roadway Express, Akron, Ohio, last month. Roadway will use the new units on North-South, three-leg, "Hot Relay" routes being set up for an average utilization of over 100,000 miles annually per tractor.

The first of the special "Hot Relay" routes being inaugurated by Roadway are direct less-than-truckload express trips already christened the "Akron Arrow" and the "Cleveland Clipper," originating in Atlanta, Ga., for Akron and Cleveland, Ohio. The new tractors and "high-cube" trailers leave Atlanta at midnight daily except Sunday. At Knoxville, Tenn., new drivers take over and head for the next "slip seat" relay station at Cincinnati, Ohio, where the third-relay drivers take over for the trips into Akron and Cleveland.

Bumper-to-back-of-cab dimension of this new White 9000 TD series tractor is 90 in. Engine is a Cummins JT6B turbo-charged, 401-cu in. diesel developing 175 hp at 25000 rpm. Front of frame drops 7¼ in. to hold engine



Typical of units now being produced by Daimler-Benz in Germany is this three-side dump, diesel-powered Mercedes-Benz truck. The company produces a line of trucks and tractors that range in payload from 3½ to 18 tons

Mercedes-Benz Trucks, Buses, Diesel Engines, Cars to Be Produced in U.S.

DAIMLER-BENZ A.G., Stuttgart, Germany, has announced plans to manufacture or assemble in the United States Mercedes-Benz trucks, buses, tractors, multi-purpose marine and diesel engines and passenger cars.

In announcing the new project, Carl F. Giese, director of Daimler-Benz A.G., said: "In 1954 Daimler-Benz stepped up its production to its highest peak . . . but we were unable to achieve sufficient expansion . . . to satisfy the increasing demands . . . for Mercedes-Benz products. We are planning assembly and manufacturing facilities in additional countries in order to realize some of the needed production capacity.

"The entry of Daimler-Benz with its varied line into the American market . . . was determined by our company's conviction that the quality automotive market in the United States, especially in the industrial field, leaves ample room for new entries and new products, especially diesel-powered products."

Independent Subsidiary

The U. S. operation, to be known as Daimler-Benz of North America, will be an autonomous, independent subsidiary. Specific details of the type and amount of financing of the Daimler-Benz North American operation were not revealed as yet.

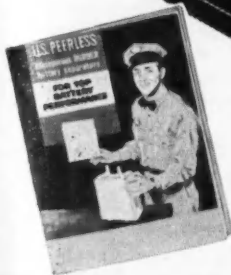
Among the products Daimler-Benz is presently producing in Germany are the following: passenger cars (from 1.8 liter four-cylinder to 3 liter six-cylinder engines), sports cars, diesel trucks and tractor trailers (ranging from 3.5 tons to 18 tons payload), buses (standard city and transit as well as luxury intercity buses), "Unimog" universal tractors (a multipurpose, cross-country vehicle with differential interlocking to 1½-ton payload), and diesel engines (stationary and mobile power units for particular use in boats and rail vehicles).

Its factories in western Germany were rebuilt from a 38-man repair service in 1945—when all its plants were rendered inoperative due to war damage—to an operation which today has more than 40,000 employees in Germany alone, with plants in 11 countries. "Mercedes-Benz" products are exported to 117 countries around the globe. In 1954, for the first time in its seventy-year history, the Daimler-Benz company in Germany passed the 240 million-dollar sales figure with about fifty percent of sales from exports.

Protects batteries against vibration damage!



U. S. Peerless MICROPOROUS Rubber Separators!



Write to address below for free copy of informative booklet on the high-performance, low-upkeep U.S. Peerless Rubber Battery Separators.

The automotive battery takes a lot of vibration and jarring, causing the plates to damage the ordinary battery separator—resulting in shorts and battery failure. But this doesn't happen when the separators are U. S. Peerless. *These rugged separators stand up under vibration, give longer service than any other separator.* They are known as battery savers.

U. S. Peerless has other big advantages: it cannot be harmed

by battery acid, heat or plate pressures—will not get mushy or soft in service. High mechanical strength prevents cutting by warped plates or loose plate material. Peerless even *outlasts* the plates. It assures more economical operating costs. In cold weather, it gives 20% faster cranking speed, 10% more power. *Protect your battery investment* by making sure your batteries have Peerless Rubber Separators.

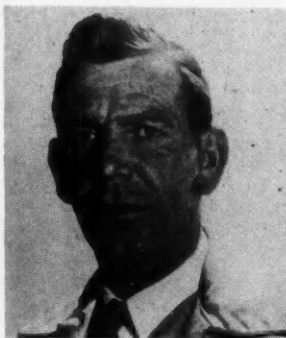
UNITED STATES RUBBER COMPANY

Electrical Wire and Cable Department • Rockefeller Center, New York 20, N. Y.





"Driver of the Year" F. J. Pemberton drives for Commercial Carriers, Inc. Shown above with Mrs. Pemberton, he receives the award from President Eisenhower in White House visit.



Honorable mention was earned by (from left) James E. Backman, Salt Lake City, Utah; Alexander Carr, St. Louis, Mo.; and Harley J. Lee, Baldwin Park, Cal.

Pemberton Named "Driver of the Year"

FLOYD J. PEMBERTON was recently named "Driver of the Year" by American Trucking Assns. The Judges decided he merited the title because of his nine-year, half million-mile record with only one minor accident (a \$65 mishap in which an automobile bumped into the rear of his truck) and for his risking his life to save two women trapped in a flaming automobile.

An employee of Commercial Carriers, Inc., a Detroit automobile haul-away company, the 33-year-old driver previously received ATA's Pro Meritis award for his swift, resourceful ac-

tion and was selected by the Michigan Trucking Assn. as Michigan's Driver of the Year.

Three other drivers were selected for runner-up Honorable Mention citations, without special distinction as to order. They were: James E. Backman, Salt Lake City, Utah, driver for Utah Sand & Gravel Products Corp., who extinguished the burning wreckage of two cars with water from his cement-mixer and saved four trapped occupants. Alexander Carr, St. Louis, Mo., an employee of the Be-Mac Transport Co. with no accidents in 27 years as a city truck driver, who used his

tractor-trailer to stop safely a bus loaded with passengers after its driver collapsed. Harley J. Lee, Baldwin Park, Calif., a Pacific Intermountain Express driver for the System Tank lines division with 2,445,000 miles of accident-free driving, who rescued ten persons overcome by carbon monoxide fumes in a panel truck.

Pemberton, a twice-wounded former Marine, owns his own truck-tractor and has been a truck driver since 1946. He is a member of Local No. 299, International Brotherhood of Teamsters, A. F. of L. He has a wife, Bonnie, and three sons.

Dayton Steel Foundry Wheels by Its 50th Milestone

DAYTON Steel Foundry Co. marks its 50th anniversary this year, still headed by one of the founding partners, George Walther, Sr., now 78. Also active in the company are his brother, William Walther, 75, eight sons of the two men and two sons-in-law, as shown in the picture at right.

The foundry began in 1905 with George Walther and his brother, Jacob, in partnership to produce miscellaneous steel castings for the infant automotive industry. It was incorporated in 1909 and got into the wheel business, for which it is now widely known, in 1912 when it produced a cast steel cruciform-type truck wheel for the White Motor Co.

To fill the demand for a lighter wheel brought about by extended use of the solid rubber tires and World War I, Dayton supplied a cast steel, hollow spoke, continuous felloe wheel in 1916. With the advent of the pneumatic tire, Dayton developed in 1924 a dual wheel for pneumatic tire

mounting with positive spacing and light weight "U" spokes. This wheel, with some minor changes in structure, is used by thousands of commercial vehicles today.

As the commercial vehicle market

broadened, Dayton added other products including brake drums (1930), fifth wheel mountings (1932), manual and hydraulic trailer landing gears (1940) and universal fifth wheels (1941).



The Walther family of Dayton Steel Foundry includes: seated, from left, Herb Dye, William Walther, George Walther, Sr., Dick Walther (on desk), standing, from left; Werner Walther, Henry Walther, Dan Walther, John Walther, George Walther, Jr., Jacob Walther, Fred Fensel, Dave Walther, Jim Walther.



Repair Bills cut $\frac{1}{3}$ with Phillips 66 Heavy Duty Motor Oil

Lee Stahl supervises maintenance for Chicago School Transit, Inc., operating 29 school buses and nine station wagons to carry almost 1,000 children a day from individual homes to public and private schools. With his wife and Joe Cheeck, he also owns and operates the company.

Says Mr. Stahl: "Our engines take a year 'round beating. Besides school hauls, there are Saturday football games, Sunday School runs, and during vacation, summer camps and play groups. Stopping at every child's home, a bus makes up to six stops in one block . . . does this for 100 miles a day. Put these stops together with low speeds for narrow streets and you get a terrific sludge problem. We had ring and valve trouble. Motors were wearing out much too soon."

Back in 1949, Chicago School Transit, Inc.

changed to Phillips 66 Heavy Duty Motor Oil. From the first, it solved their problems.

"Our records show we've cut repair bills by one-third," says Lee Stahl. "Now, one night-time mechanic easily handles all our maintenance. Engines are cleaner . . . go longer before overhaul. One Ford 60-passenger bus has needed nothing more than a tune-up after nearly four years of operation on your oil."

Today, Chicago School Transit uses Phillips 66 Gasoline, Gear Oils and Greases, as well as Heavy Duty Motor Oil. They depend on these products for good service and for keeping repair bills down.

Good service with less maintenance always means more profit. And no matter what your operation, there's a Phillips 66 Heavy Duty Motor Oil that's suited for your fleet.

● Test Phillips 66 Heavy Duty Motor Oils against the oil you are now using. A Phillips 66 Lubrication Engineer will be glad to help you set up a test. Write to: Sales Department, Phillips Petroleum Company, Bartlesville, Oklahoma.

It's Performance That Counts!

PHILLIPS 66 HEAVY DUTY MOTOR OILS

COMMERCIAL CAR JOURNAL, June, 1955

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Size of the LeTourneau Sno-Freighter, built for Alaska Freight Lines, is shown comparatively by the men standing beside the power control car. Low-pressure tires carry the cars and their cargo along natural routes of inland Alaska to settlements isolated by winter weather. Operational controls are located on a panel under

the central window. Crew's accommodations are immediately behind with generator-sets and fuel tank toward the rear of the car. Electric-powered winch forward of the front axle is for emergency and tow purposes. Tractive effort is proportioned along the entire vehicle by making each wheel a driver.

Fruehauf's Stainless Steel Units

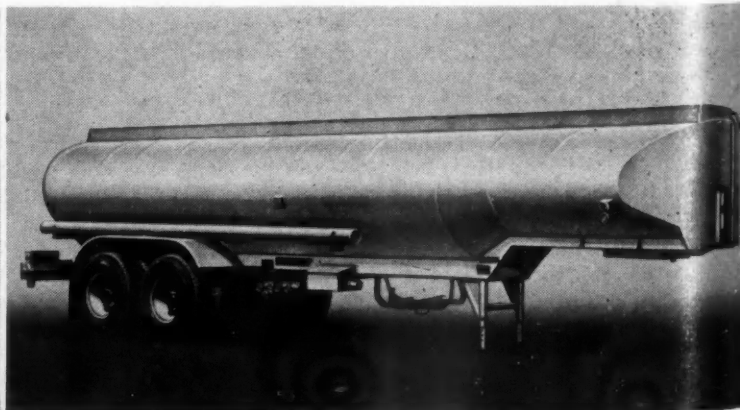
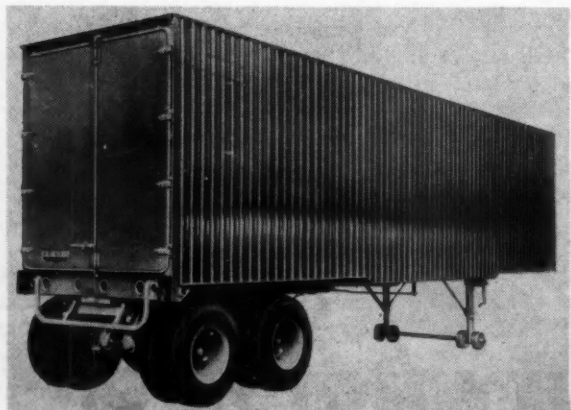
FRUEHAUF TRAILER CO. is announcing its new stainless steel Volume*Van. This new unit surpasses in carrying capacity the highly successful "Hi-Cube" design. While not exceeding standard exterior overall widths, the interior of the new stainless steel Volume*Van provides 94 in. of clear inside width, plus additional height gained by new floor and roof construction with additional inside length due to new developments in the front end and at the rear doors.

Interesting feature of the design is a square tube outside the chassis frame members which carries the wires and brake lines.

The new stainless steel Volume*Van is 35 ft long with normal height, 7 ft 10½ in. The under construction is a Lube-Free unit with 10.00 x 20.00 tires, 12-ply and 16½ x 7 air brakes.

NEW STAINLESS STEEL tank trailer will shortly be put into production by Fruehauf. Advanced hydraulic design is employed in the tank cross-section form, namely in the use of an oval top and a half-round bottom. This provides a shape which not only lowers the center of gravity but also contributes materially to the structural strength.

The tank is a three-compartment unit of drop frame type. It has a total capacity of 8300 gal, divided into three compartments of 3700, 1200 and 3400 gal. The shell is stainless steel with a sloping rear head. The chassis is a gravity tandem type mounted on 10.00 x 20.00, twelve-ply tires with 16½ by 7 in. Midland Steel airbrakes. Gear boxes and wheels are aluminum for lightness. The complete unit weighs 9250 lb.



Turbochargers for Automotive Engines

MIEHLE-DEXTER announces a line of small, high-pressure turbochargers for engines ranging in power output from 50 to 1000 hp. These units have been developed under a license agreement with De Laval. They are now being tested by manufacturers of both two- and four-cycle automotive-type engines, for service in road and off-highway vehicles.

Units are of monorotor construction—that is, the compressor impeller and the turbine wheel are combined in a single rotor structure. Another construction feature are the specially-developed anti-friction rotor bearings.

This new turbocharger is independent of the engine—not only with regard to lubrication of the unit, but also with regard to engine cooling-water requirements. No water jacketing of any kind is used.

While the turbine wheel operates with full admission and steady flow, and therefore with maximum possible efficiency, provisions have been made for the recovery of the energy in the engine exhaust pulsations. These provisions amount, essentially, to incorporation of the De Laval pulse converter system into the turbine nozzle box.

For careful matching of the turbocharger to the engine, the turbine nozzle guide vanes are so constructed that their position can be varied in the field. One and the same turbine can readily be adapted to a wide range of engine operating characteristics. It can be mounted either vertically, horizontally, or in any angular position.

It will be available in four standardized models, to suit a wide range of engine sizes. Weights of the four units vary, from approximately 20 lb for the smallest size, 75 lb for the largest.



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Genuine Ford Parts really keep 'em rolling

Ford parts keep Ford fleets under way

*Keep your fleet out of the repair shop with Genuine Ford Parts!
They're made right, to fit right, to last longer in Fords!*

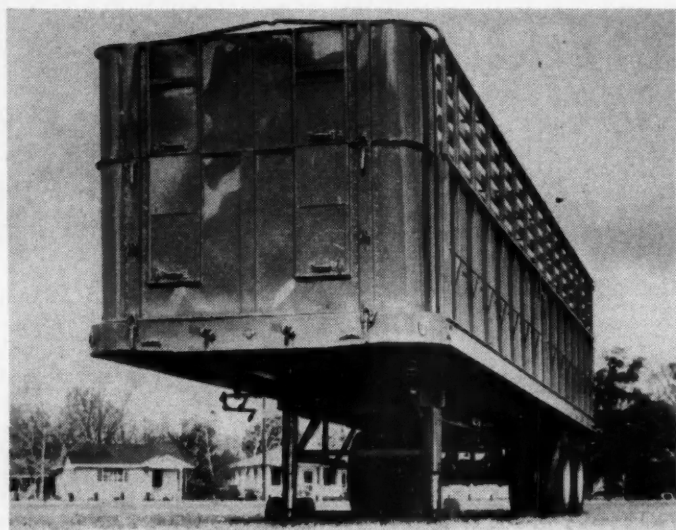
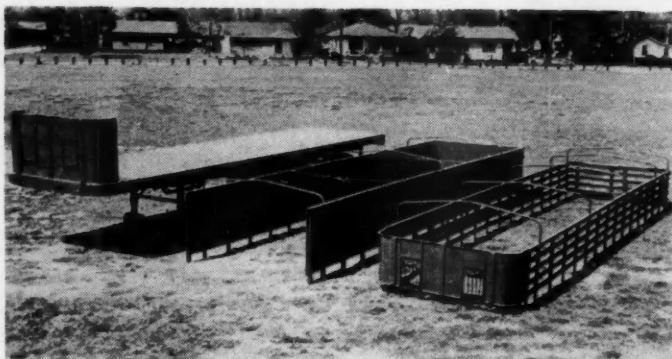
Profit-wise fleet operators are standardizing on the use of easily available Genuine Ford Parts for all their fleet operations. A quick look at the facts will show you why.

Ford Parts replacements are made to the exact specifications set by the same men who designed the Fords in *your* fleet. Engineered to be exact replacements for the original parts in your Fords, they're easy to install . . . cut costly downtime . . . put your Fords back on the road quickly.

Keep your fleet on its feet

Genuine Ford Parts have to "prove themselves" in grueling track-tests at Ford laboratories and proving grounds *before* manufacture. That's why you can be sure they're made right to keep your fleet on the road *longer!*





Dorsey's 32-ft., Three-Way Trailer

DORSEY Trailers offers its new deep-frame "Giant" platform trailer for which two bodies are available. Basically it is a 54,000-lb gross capacity platform, 32 ft long, with an 18-in. main frame that weighs 8250 lb. A completely new steel-staked plywood grain body that is sealed with grain-tight rubber gaskets and engineered so that an additional slatted livestock body, also steel-staked, can be mounted on top of it. Tarpaulin bows and a tarpaulin reaching down to the top of the grain body can be added.

Major innovation in design is the piercing of the 18-in. deep longitudinal members of pressed steel so that one-piece, 6-in. cross members welded through both members of the main frame also are the floor sills of the trailer.

The "Giant" is all-welded construction with reinforced gooseneck and heavy duty rolled steel outside body borders. Landing gear is two-speed, heavy-duty vertical, and wheels are 5-spoke cast steel. Outside stake pockets and heavy-duty skid rails are available at no extra cost.

The hollow steel stakes of the plywood grain body are set in pockets on 24-inch centers. The body itself has an all-metal front, two plywood and steel stake sections to each side and two plywood rear sections. The livestock addition is in eight sections, two front and back and two to each side.

International's 16,000 lb. GVW, Walk-In Metro Cab

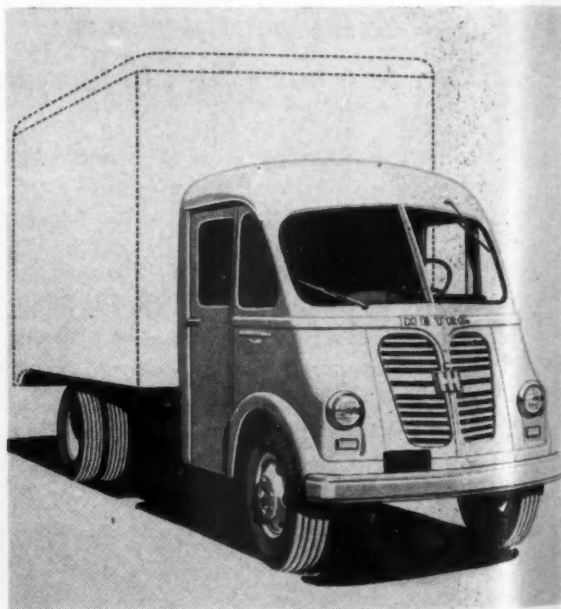
INTERNATIONAL HARVESTER CO. announces a new low-step, "walk-in" Metro cab. Rated at 16,000 lb GVW, the new model in International's RM-160 series makes available to multi-stop truck users a factory-equipped chassis and complete walk-in cab with short bumper-to-back-of-cab dimension. New unit is adaptable for local hauling and delivery of bottled goods, furniture, garbage and refuse, wholesale milk, ice cream, and other products in a variety of van and open-type bodies.

The new chassis and cab models provide a 90- $\frac{1}{4}$ -in. CA dimension for 137- $\frac{1}{4}$ -in. wheelbase units; 102- $\frac{1}{4}$ -in. CA for 149- $\frac{1}{4}$ -in. wheelbase; 114- $\frac{1}{4}$ -in. CA for 161- $\frac{1}{4}$ -in. wheelbase; and 132- $\frac{1}{4}$ -in. CA for 179- $\frac{1}{4}$ -in. wheelbase.

Regular Metro Construction

Construction includes regular Metro front-end section with swinging doors, or optional folding doors which fold back against the body and can be left open.

Standard power plant is the 131-hp SD 240 engine with the 140-hp BD 264 engine optional. Standard transmission is the four-speed synchro-mesh; five-speed synchromesh with direct or overdrive in fifth are optional. Single-reduction rear axle is standard equipment; two-speed rear axle is optional.



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SEATS 3 TO 4 TIMES FASTER THAN OTHER CHROME RINGS!

HASTINGS *Beveled* 2-C OIL RING

Note beveled shape
of steel sections

See how Hastings beveled rail offers extra chrome on oil-wiping surfaces. Even as ring wears, solid chrome meets the cylinder wall.

"Fineline" wall contact
assures fast seating

See the Difference!

BEVELED CHROME RAIL—Makes fineline contact with cylinder wall . . . less area to wear-in—less time to break-in! Another Hastings first.

CONVENTIONAL CHROME RAIL—Originally developed by Hastings . . . now replaced by fast-seating Beveled Chrome, which only Hastings has.

Only Hastings gives you a chrome oil ring with patented,* *beveled* rails—a chrome ring set that seats 3 to 4 times faster than conventional chrome!

This exclusive beveled design provides positive, fineline contact with any cylinder wall—tapered, out-of-round or rebored. Oil control starts right now. And because Hastings is a *soft pressure* oil ring, you know it is gentle.

Beveled chrome oil rings are included in the Hastings 2-C Chrome Sets your jobber has now. With Hastings' torsional designed, high-graphitic iron compression ring in the same set, you get the fastest seating, best performing long life chrome combination there is!

Next ring job install the *only* chrome rings that are beveled to seat fast, and stop oil-pumping from the start. Install the Hastings 2-C Chrome Set that is "Motor Engineered" by replacement specialists!

*PATENT NOS. 2511874, 2585042. Other Patents Applied For.

HASTINGS MANUFACTURING COMPANY, HASTINGS, MICHIGAN • HASTINGS LTD., TORONTO
Piston Rings, Casite, Oil Filters, Spark Plugs



HASTINGS

STEEL-VENT PISTON RINGS

Chrome Faced for Heavy-Duty Service

Tough on oil-pumping . . . Gentle on cylinder walls

"Giant" availability, platform, 8250 in body and engineering, also carpaulin of the

of the steel so through the floor

th rein- outside heavy-duty Outside available

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JUNE NEWS ROUNDUP

Transport Policy Revision

Transport policy revision as proposed by the President's Cabinet Committee and backed-up by legislation introduced last month in the Senate and House brought mostly adverse comment from truck user groups. In brief, here's what they said:

... ATA's Executive Committee

ATA's Executive Committee at its recent meeting formally termed the Cabinet Committee Report on Transport Policy and Organization "... an economic booby-trap for small business." It voted to oppose the legislation implementing the report.

... CERT

CERT, The Council of Eastern Rail and Truck Common Carriers, approved some parts of the report. Rail and truck members of CERT endorsed: Redefinition of the term "private carrier by motor vehicle"; redefinition of motor and water contract carriage and the filing of actual rather than minimum charges; provision of definite statutory standards for determining exempt status for freight forwarder associations; and re-examination of agricultural commodity exemptions.

Pacific Inter-mountain Express has unveiled drawings and plans for the \$750,000 "ranch house" style office building it plans to construct in the suburban and woodsy - atmosphere of Orinda, Cal., across the bay from San Francisco. The trucking firm has taken some public relations steps that might well be followed by other companies planning a move to semi-residential areas. The Orinda Assn., a group of home-owners, has been making extensive efforts to keep its area unsullied by industry, but PIE has taken to the entire community its plans for the new office building and prepared a complete three-part "Report to the People of Orinda About the Plans of PIE for development of



its Pine Grove Property." This report in its introduction, states: "We have been asked many questions about our Pine Grove development and many rumors are being spread concerning our plans. The first section of this report is to answer those questions and to give the facts as they pertain to the rumors. The second part is concerned with community planning. The final part concerns the construction of our office which was designed by Cliff May, nationally known designer ..."

... ATA's Private Carriers

ATA's Private Carrier Conference said the report "... represents potentially one of the greatest threats which private carriers have faced." It would, said the Conference, "... nullify the hard won 'primary business' test which has afforded a definite workable basis for ... definition of private carriage."

... Tank Truck Carriers

National Tank Truck Carriers, ATA conference, meeting last month in San Francisco, cited a need to tell the public the reasons for opposing the proposed legislation. It could mean the end of effective rate regulation, NTTC Managing Director Sutherland reported.

... Private Truck Council

Private Truck Council of America warned its members that the legislation "... is the greatest single threat to private truck operators since the Supreme Court decision ... which established the 'primary business' test." PTC added, the railroads "... have already turned on their propa-

ganda guns. It will take the cooperation of all private truck operators to win the forthcoming battle ..."

... Policy Report Available

If you'd like copies of the Cabinet Committee's Transport Policy Report you can get them at 15¢ each from the Supt. of Documents, U. S. Government Printing Office, Washington 25. D. C. Ask for Catalog No. C 12:T 68/2.

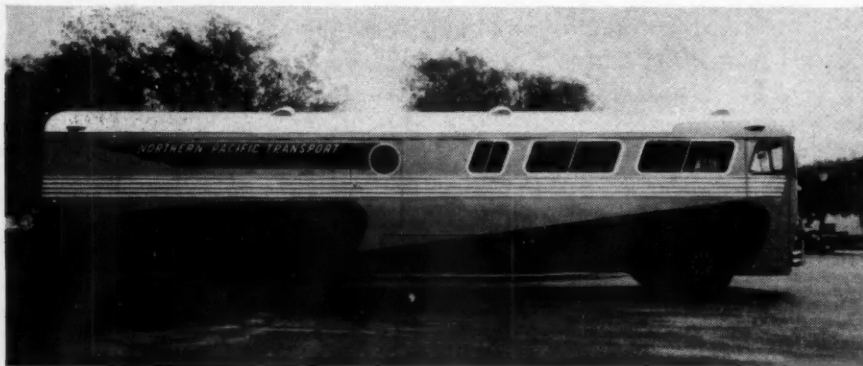
NTTC Elects Officers

Elected officers of National Tank Truck Carriers, ATA conference, for the coming year at the recent conference meeting in San Francisco, Cal., were J. A. Roberts, P. B. Mutrie Motor Transport, president; O. B. Maxwell, Maxwell Co., first vice-president; Frank L. Grimm, O'Boyle Tank Lines, second vice-president; Jack O'Harra, R. A. Conyes Tank Lines, third vice-president; William Lemmon, Lemmon Transport, treasurer; and C. Austin Sutherland, NTTC managing director, secretary.

(TURN TO PAGE 225, PLEASE)

Instead of a Train

Northern Pacific Railroad's highway subsidiary, Northern Pacific Transportation Co., operates this combination freight and passenger vehicle daily over a 400-mile route between Spokane, Wash., and Paradise, Mont. It replaces a short line train. The 40-ft unit was built by Crown Body & Coach Corp., Los Angeles, Cal. It carries 20 passengers up front, has over 900 cu ft of freight space in the rear. A 238 hp gasoline engine located amidships powers the vehicle through a 10-speed transmission and a Timken-Detroit tandem drive rear axle.





You can see it in his eyes!

The strain, the weariness—the mental and physical wear and tear of sky glare—show clearly in his eyes, at the left.

At the right, his eyes are protected by E-Z-EYE Safety Plate Glass with the shaded band. He can travel farther, faster without tiring. And the owner of the *truck* can make more money. E-Z-EYE is another L·O·F development for the automotive industry. Take advantage of it when you buy your next carrier.

For further information write Dept. 5465, Libbey·Owens·Ford Glass Company, 608 Madison Ave., Toledo 3, Ohio.

Be sure your next truck is equipped
with a shaded windshield of
E-Z-EYE SAFETY PLATE GLASS



LIBBEY·OWENS·FORD *a Great Name in Glass*

1955 New Truck Registrations by Makes by States*

STATE AND MONTH		Brockway	Chevrolet	Diamond T	Dodge	Ford	G.M.C.	International	Mack	Reo	Studebaker	White	Willis Jeep	Willis Truck	All Others	Total	
Alabama	Mar.		438	3	118	573	100	136	11	2	9	29	7	9	10	1,445	
	3 Mos.		1,309	8	304	1,369	281	380	23	3	23	46	15	20	14	3,793	
Arizona	Mar.		142		68	182	39	48	3	2	8	4	14	25	10	525	
	3 Mos.		346	1	138	368	98	123	5	3	19	16	23	48	18	1,206	
Arkansas	Mar.		215	2	74	372	51	83	2		10	3	8	4		824	
	3 Mos.		969	6	229	1,349	267	308	8	4	45	17	20	9		3,231	
California	Mar.	1	1,274	9	498	2,467	413	423	34	10	121	31	135	201	95	5,712	
	3 Mos.	34	4,480	44	1,487	8,079	1,336	1,189	81	27	255	170	286	487	190	16,181	
Colorado	Mar.		221	3	86	292	56	91	4	2	16	4	46	51	29	901	
	3 Mos.		673	5	216	739	181	249	9	10	37	14	101	165	52	2,481	
Connecticut	Mar.	3	102	5	49	161	17	70	24	1	11	10	6	12	3	474	
	3 Mos.	8	322	14	146	417	94	176	31	9	16	52	16	36	16	1,353	
Delaware	Mar.		52	1	23	48	21	26	3		1	1				179	
	3 Mos.	2	172	1	57	136	52	91	100	1	3	24	3	1	6	649	
District of Columbia	Mar.	1	51		31	79	10	30		5	1					218	
	3 Mos.	2	137		56	151	22	54	1	10	1		2	6	6	446	
Florida	Mar.		440	9	171	932	134	201	30	6	43	57	22	44	19	2,108	
	3 Mos.		1,611	16	451	2,173	480	552	109	21	100	136	87	149	35	5,920	
Georgia	Mar.		545	7	199	840	136	239	36	3	33	28	4	9		2,079	
	3 Mos.		2,110	9	582	2,447	488	640	67	10	89	94	35	23	5	6,599	
Idaho	Mar.		81	1	37	99	42	68	2		9	3	10	21	6	379	
	3 Mos.		266	4	104	296	119	169	8	3	28	8	28	75	11	1,119	
Illinois	Mar.		606	55	286	1,269	147	563	27	6	51	52	37	46	22	3,167	
	3 Mos.		2,203	113	759	3,050	504	1,716	73	53	107	172	67	106	71	8,984	
Indiana	Mar.		537	7	183	839	106	455	15	8	94	57	18	22	13	2,358	
	3 Mos.		1,575	21	447	1,872	316	1,096	22	22	216	156	31	51	49	5,874	
Iowa	Mar.		277	9	92	564	43	267	24	1	23	13	9	13	24	1,359	
	3 Mos.		1,000	22	286	1,422	170	844	32	5	49	37	19	40	33	3,689	
Kansas	Mar.		377	4	74	834	83	194	1	1	18	14	10	15		3,414	
	3 Mos.		1,131	6	192	1,183	226	525	1	8	48	28	18	46	2	1,045	
Kentucky	Mar.		337	2	52	409	66	113	7	1	13	12	12	17	4	3,327	
	3 Mos.		1,164	5	203	1,121	263	355	23	4	38	47	42	46	16	1,494	
Louisiana	Mar.		379	3	103	659	83	199	5		26	16	12	9		4,664	
	3 Mos.		1,498	6	289	1,838	295	526	16	2	90	40	42	21	1	5,883	
Maine	Mar.		71		10	93	10	33	1		5	1	10	50	4	840	
	3 Mos.		254	1	46	245	77	106	11	1	17	10	27	17	11	867	
Maryland	Mar.	2	126	6	80	259	29	75	20	1	15	15	11	33	15	1,842	
	3 Mos.	5	529	20	200	644	97	262	50	4	25	35	23	21	20	1,062	
Massachusetts	Mar.	4	180	7	75	423	36	179	36	9	11	42	19	21	20	2,703	
	3 Mos.	8	649	30	175	1,040	121	333	66	18	21	87	43	76	34	2,395	
Michigan	Mar.		519	12	221	1,163	98	187	18	13	31	19	26	26	30	7,761	
	3 Mos.		2,198	39	723	3,293	548	853	34	28	66	63	59	63	94	1,169	
Minnesota	Mar.		289	4	62	503	52	190	5	1	15	7	15	21	5	3,432	
	3 Mos.		901	12	234	1,338	187	555	10	5	49	20	30	68	23	1,338	
Mississippi	Mar.		414		80	546	103	146	2		22	3	4	30	3	3,668	
	3 Mos.		1,289		202	1,353	315	391	8	1	56	11	10	20		1,599	
Missouri	Mar.		448	40	141	619	91	191	13	4	16	23	5	43	20	5,898	
	3 Mos.		1,924	47	397	2,023	419	823	14	6	53	77	21	45	3	583	
Montana	Mar.		115		60	170	48	97	6	1	22	3	23	45	13	1,489	
	3 Mos.		311		132	413	120	224	14	1	38	15	96	152	13	941	
Nebraska	Mar.		196	12	75	375	37	165	4	1	16	12	14	21	13	3,032	
	3 Mos.		752	45	215	1,031	171	540	12	3	39	31	28	69	96	1,183	
Nevada	Mar.		33		43	54	11	21	1		14	1	8	42	2	610	
	3 Mos.		104		78	161	52	132	1		35	1	4	13	3	251	
New Hampshire	Mar.		59		23	107	4	26	2		6	1	3	11	24	5	516
	3 Mos.		128	1	54	193	19	53	12	1	12	3	16	21	3?	1,809	
New Jersey	Mar.	18	300	16	276	647	94	235	64	6	20	67	38	75	70	4,357	
	3 Mos.	47	976	35	530	1,357	367	513	107	13	61	178	5	18	5	4,414	
New Mexico	Mar.		118	2	31	154	30	32	8		9	2	27	44	6	1,206	
	3 Mos.		377	6	113	358	114	125	10	36	24	6	59	90	78	3,758	
New York	Mar.	42	829	26	389	1,123	221	581	124	36	49	111	60	302	204	9,780	
	3 Mos.	107	2,122	93	1,330	2,394	749	1,540	255	93	102	328	161	302	204	9,780	
North Carolina	Mar.		494	4	171	625	102	168	28	2	33	38	11	14	9	1,629	
	3 Mos.		1,430	15	407	1,758	315	419	59	3	79	86	44	36	15	4,696	
North Dakota	Mar.		41	1	29	78	15	69			2		6	15		723	
	3 Mos.		109	1	81	201	62	239			8		1	6		412	
Ohio	Mar.		700	10	318	1,552	119	583	58	14	60	84	24	51	24	3,597	
	3 Mos.	2	2,155	25	712	3,193	375	1,408	106	30	100	10	6	13	3	8,626	
Oklahoma	Mar.		239		63	396	67	160	3	2	10	10	6	13	3	972	
	3 Mos.		1,049	1	220	1,219	279	470	20	2	35	40	15	26	8	3,384	
Oregon	Mar.		189	5	81	316	69	136	11	2	21	20	22	73	33	978	
	3 Mos.		673	11	211	830	235	348	23	8	53	42	69	205	52	2,760	
Pennsylvania	Mar.	19	627	10	342	1,230	146	624	96	28	53	95	7	97	20	3,394	
	3 Mos.	54	1,772	27	806	2,561	418	1,473	218	56	127	195	18	237	47	8,007	
Rhode Island	Mar.		58	9	8	84	5	43	6		2		3	4	3	228	
	3 Mos.	1	169	13	35	227	17	97	14	3	5	13	1	6	6	600	
South Carolina	Mar.		130	3	36	201	21	44	2		19	31	6	6		448	
	3 Mos.		574	4	161	696	107	158	15		5	5	10	11		1,777	
South Dakota	Mar.		74	3	32	135	26	112			16	8	30	46		1,213	
	3 Mos.		254	5	89	378	84	302	14	1	21	25	9	5	2	1,552	
Tennessee	Mar.		416	2	164	593	99	196	14	6	43	65	20	19	2	3,938	
	3 Mos.		1,186	6	373	1,445	301	452	18	8	42	57	36	32	6	4,103	
Texas	Mar.		1,221	10	297	1,685	255	467	15		156	214	114	100	24	12,990	
	3 Mos.		4,526	26	897	4,601	757	1,524	46	5	156	214	114	100	24	12,990	
Utah																	

Data from R. L. Polk & Co.

• More true signals than
• Legal and
Columbia a
Signal-Stat

COMMERCIAL

es*

Total

1,446
3,793
525
1,206
824
3,231
5,712
16,181
901
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474
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5,920
2,079
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72,583
182,858
194,120

June, 1955

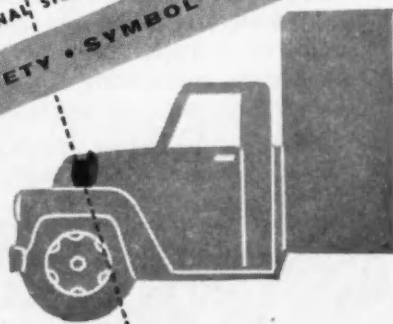


HITCH YOUR WAGON TO *the* ~~A~~ STAR!

Signal-Stat

DIRECTIONAL SIGNALS • SWITCHES • FLASHERS

SIGNAL OF SAFETY • SYMBOL OF QUALITY



- More trucks use Signal-Stat Class A—Type 1 directional signals than all other makes combined!
- Legal and approved in all 48 states and the District of Columbia and in Canada wherever approval is required.

Signal-Stat Corporation, 523-539 Kent Avenue, Brooklyn 11, N. Y.

COMMERCIAL CAR JOURNAL, June, 1955

Quota-Bonus Inspires Route Salesmen

Continued from Page 75

May quota figures out to \$2284, which gives him a chance to keep fighting with his feet on the ground. As he makes his quota at this lower level the ante is raised again by July and Mack's working his way up again.

On a short term basis distortion is possible! Mack has a bad March, yet his April quota is still high, since it is based on a relatively better February performance. This lag cushions the purely temporary slumps.

Retroactive Bonus

We have also made it possible for a route salesman to bridge a brief slump without loss of bonus. The salesman earns a \$10 bonus each month he makes his quota. He gets an added bonus of \$15 if he hits his total quota for the six months. Whenever he wins that latter bonus, he also gets retroactively any monthly bonus he may have missed during the six-month period.

Meanwhile the top salesmen are busy trying to get their routes split, because the company really makes a route split pay off! First, to a man whose route is split, it pays in a lump sum the commission for one year that is represented by the surrendered volume. Second, to protect the salesman's weekly income, a "kitty" is added to whatever his earned commissions may be for each week. This kitty diminishes in amount each pay day by 25¢ or 50¢ depending on the type of route serviced.

Thus, if Mack's route is split and he surrenders volume averaging \$14 weekly, he gets a lump sum payment of \$728. In the first week after the split he gets \$14 added to what he earns off the remainder of his route. In the second week \$13.50 is added, in the third he gets \$13, and so on.

New Salesmen

We also use this kitty to build up new routes. Our route salesmen's commissions average almost \$90 a week, so \$90 weekly becomes the new salesman's target. He starts with a straight wage of \$75. As soon as his weekly business reaches \$400, he goes onto a 15 per cent commission, plus a kitty of \$30. This gives him a taste of the \$90 a week. Then, just as with the route split, the kitty dwindles by 50¢ or 25¢ each week, while the new route salesman works to keep his commissions rising ahead of the slimming kitty.

We will be the first to admit this quota and bonus set-up isn't perfect! But it has come closest to dealing with all the pitfalls in setting sales quotas that used to plague us.

END

Please Resume Reading Page 76

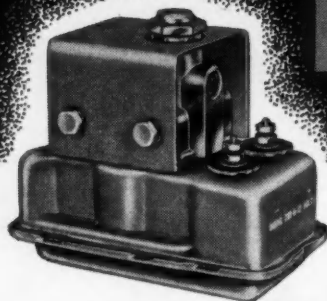
COMMERCIAL CAR JOURNAL, June, 1955

stop *Vapor lock*
...for good!

WITH STEWART-WARNER

Electric

Fuel pump



- for faster starts, winter and summer
- for positive gas-flow . . . always!

Vapor lock means *deadlock* . . . in your trucking and transporting operations. Time wasted, schedules shot, money lost. You can avoid it by installing a Stewart-Warner Electric Fuel Pump on your trucks and buses. Assures engine a *positive* fuel supply at all times. The result is faster starts, consistently dependable performance . . . all year!

The minute the ignition switch is turned on, gas is fed to the engine.

That's because the Stewart-Warner Electrical Fuel Pump operates independently of the engine, works only as needed, eliminates battery grind. Stalling is a thing of the past.

Heavy duty construction, sealed against rain and road-splash, protected under all conditions. Installation is simple on any truck, bus or car. Begin now to save with Stewart-Warner Electric Fuel Pumps. See your dealer or write:

STEWART-WARNER

Instrument Division, Dept. DD-65
1840 Diversey Parkway, Chicago 14, Illinois

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tools in t

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SNAP

COMMERCIAL



...time-saving

Snap-on Tools

can solve your biggest service headaches

Thousands of dealers have found there's a big pay-off in being *personally* concerned with the *kind* of tools in their mechanics' hands.

Taking a man's tool equipment for granted can cost plenty!... in man-hour productiveness... in customer satisfaction... in shop volume and in service profits.

That's truer today than ever before. More cars by millions—and *more advanced cars*, present servicing requirements to challenge the ablest mechanics. Consequently, your profit percentage from shop operations (labor plus parts sold) depends in large measure upon the adequacy of the tools your mechanics are using.

To increase profit percentage do this. See to it that *Snap-on Service is covering every man in your*

shop. Invite the *Snap-on Man* in, welcome him, endorse him. Do as many profit-minded operators have done... ask him to assist in planning the modernization of service tool equipment throughout your shop and, if desired, arrange installment financing for shop or individual mechanics.

You'll be in good company, for in thousands of shops *Snap-on Service* is literally an institution. Service Managers like it. *Mechanics like it*. They have pay-check proof of the earning power of a complete set of the *right* tools.

Ask your shop foreman *now* to notify you next time the *Snap-on Man* calls... make profitable use of the service he can render.

SNAP-ON TOOLS CORPORATION

8026-F 28th Avenue • Kenosha, Wisconsin

*Snap-on is the trademark of Snap-on Tools Corporation



Bowman Builds a Better Body

Continued from Page 77

bodies. They have been building many of their own units since about 1922. They started by building milk wagons and as they switched from horse drawn vehicles to motorized equipment they began to build retail, wholesale and trailer bodies.

They build about 60 to 70 new bodies a year in their own shops. Their yearly requirements of new truck bodies over and above this are contracted for in outside, custom body shops and supplied through new trucks such as Diver and International retail units which

are purchased from the manufacturer complete with milk bodies. With a fleet of over 1700 units their new truck requirements run well over 100 per year. Bowman also repairs 500 to 600 truck bodies per year and completely paints over 700 trucks per year.

Experienced Builders

Through the years procedures and practices have been changed so that they have reached a high degree of efficiency in their operations. Their men are highly skilled specialists and have learned the hard way how the work should be done to effect great savings in time which in turn means appreciable savings in costs.

The standard Bowman reefers in the wholesale field are 12 ft, 6 in. and 14 ft, used for transporting of dairy products to the various stores, institutions, etc. The company has 300 of these units in operation. The design is quite similar to that used as far back as 1938. This body lasts up to 10 years without major maintenance. It withstands the vibration of cobblestone streets and is constructed in such a way that replacement panels or parts can be installed simply when required.

1. The Frame

The first step in body construction is the sawing of the roof bows, uprights, door framing and other wooden components. Wood has been selected over steel framework because of its better insulating quality, its resistance to deterioration (when sealed properly) and its ability to withstand stress and strain without loosening.

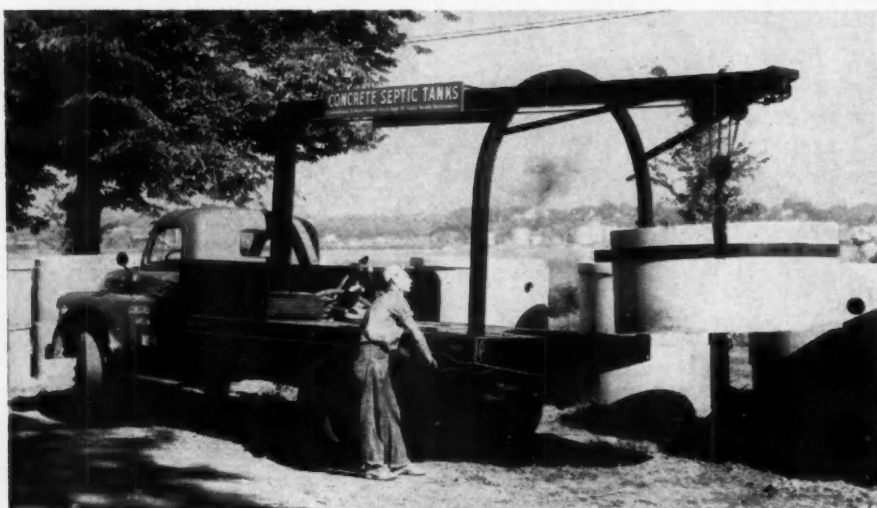
While weight may be slightly higher than steel, weight is not a factor in this type hauling and is inconsequential when other factors are taken into consideration.

2. The Floor

Subflooring is 3/4-in. oak in 6-in. planks, laid on cross sills with 16-in. centers. The flooring is bolted to the sills with 1/2-in. cracks between each board for ventilation. The next surface is a layer of paper laid over a coating of cement. The paper is again cemented with No. 5 Mastic and a

(TURN TO PAGE 116, PLEASE)

BRADEN WINCHES



Another Job Made *EASIER* with a BRADEN Winch

Every week we hear of new ways BRADEN owners are putting their BRADEN Truck Winches to work. BRADEN'S ruggedness, safety and dependability, make them economical on any handling job.

BRADEN Winch sizes are available from 3,000 to 100,000 pound capacity models, to fit any make of truck. Be Safe . . . use BRADEN Truck Winches.

BRADEN WINCHES ARE IN SERVICE AROUND THE WORLD

Write for Complete Catalog

BRADEN WINCH COMPANY

P. O. Box 547, Broken Arrow, Oklahoma



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bodies.
0 units
nts run
Bowman
truck
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cedures
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June, 1955



John F. Johnston, Owner, Commercial Lubricating Service, 615 North Paulina Street, Chicago 22, Illinois.

Handles 6,000 lube jobs a month!

Commercial Lubricating Service Does It With Cities Service Lubricants!

Country lane or busy highway . . . 2 P. M. or 2 A. M. . . if there's a truck to be lubricated, you'll find John F. Johnston's men on the spot, and on the job 24 hours a day with Cities Service Lubricants.

Johnston's entire business is lubrication. Operating out of Chicago, he has one of the most unique enterprises in the country today. Trucks are lubricated where they stand. No shop-time necessary. No loss of miles or those valuable hours.

Obviously, this business depends solely upon two things—the best service and the best products. And that's why Johnston uses Cities Service Lubricants. His reasons: "Trojan H-2 Grease, with high melting point, constant consistency, and water resistance, gives maximum trouble-free operation. Trojan MP Gear Oil pro-

vides excellent extreme pressure qualities, and foam and rust resistance. Cities Service C-300 Motor Oil gives extra high detergency and oxidation stability. Keeps our clients' engines free of sludge and varnish."

But the real proof of this story lies in the success of Johnston's business. It is reflected in his great and growing list of nationally known clients . . . in the 6,000 trucks he services each month . . . and in the new branch office recently opened in Milwaukee. It's one more success story from a firm using the Cities Service line of highest quality petroleum products . . . a story you'll be likely to tell also, when you begin using these products. For more information, contact your local Cities Service office or write: Cities Service Oil Company, Sixty Wall Tower, New York 5, N. Y.

CITIES SERVICE
QUALITY PETROLEUM PRODUCTS

Bowman Builds a Body

Continued from Page 114

2-in. thickness of plastic insulating material was substituted, but the company has not as yet determined its value and dependability over cork.

The next layer is a sheet of 1/2-in. plywood which is screwed through the cork and into the oak

subflooring with 3-in. wood screws. Directly over this the stainless steel flooring will be laid. Wheel houses as shown are filled with spun glass insulation (below the 1-in. flooring). This will be sealed before the mudguard is attached.

3. Body Bracing

Note construction of the braces which hold the body framing to the floor and to the roof section. Each stud is carefully bolted to the sup-

porting member through reinforcing irons. Conduit for lighting permits easy repair of wires if and when necessary.

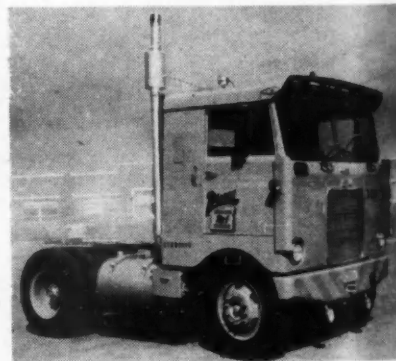
The floor sills extend outward from the body a distance of six inches and provide support for the steel rubrail which will be attached later. Corners are fitted with rounded wooden sections which are attached to the posts with screws. The outside is being covered with a layer of 1/4-in. plywood.

4. Insulation

Over the plywood a 20-gage steel has been placed, being nailed at the seams. The entire top section and the rounded corners have been filled with four inches of fiberglass. Side walls have been filled with three inches of the same material. Over this a sheet of galvanized 26-gage steel is being placed, being nailed to the wooden uprights with nails.

(TURN TO PAGE 121, PLEASE)

Pierce Adds 25 COE's



25 new Kenworth COE trucks head the \$600,000 equipment expansion program of Pierce Freight Lines, Inc. In addition to the new tractors, 54 trailer units including 24-ft vans, flat-bed units and refrigerator models have been added. The trailer units were manufactured by Fruehauf Trailer. COE units are Model No. 521, two-axle trucks with single axle drive. All have 73-in. COE sleeper cab with a 26-in. sleeper. Available loading space can be increased to 51 ft when the Kenworth COE-73 is used as a dromedary with semi-trailer or with a full truck and trailer. When used with double bottoms, loading space is 48 ft. Powered with 200-hp Cummins diesels, the trucks have 130-gal fuel capacity. The high-tensile steel wheels have 10:00 x 22 tires. Numerous weight-saving features and materials were incorporated to give each truck a chassis weight of 10,910 lb.

5. Interior

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COMMERCIAL

for
LOWER UPKEEP COSTS
Specify **HANSEN**

No. 60

No. 10

No. 85

No. 125

HANSEN
HARDWARE for
Commercial Bodies

SIMPLE design—easy application—strong, durable construction—give Hansen Hardware its ability to stand up under severe service conditions.

Hansen products illustrated include:

No. 10 Continuous Hinge. Made in standard 12-inch lengths. One length provides hinges of all lengths. Made of .078 gauge steel. 1/4" hinge pin. Wt. 1 1/4 lbs. ea. 12" unit. 12 units per box.

No. 60 Extension Lock. Made in one piece. No loose parts. 1 1/4" hardened striker bolt. Matched rosettes. Strong. Neat. Attractive. Size, 5" x 10". 5" handle. Wt. 2 5/8 lbs.

No. 85 Window Regulator. Straight-up lift. No sticking or jamming. Easy, fast operation. Endless chain. Right- or left-hand application. Crank or wing types. Five lengths, 22"-30".

No. 125 Slam-and-Take-up Lock. For side or rear double doors. Left-hand side includes bolt with hook. Right-hand side of lock includes striker bolts, center mechanism and 26" rods. Flush or offset bolts, as specified.

Lower upkeep invariably comes from using Hansen Hardware—often lasting longer than the body on which installed.

REQUEST CATALOG FOR COMPLETE INFORMATION

A.L.HANSEN MFG.CO.
5047 RAVENSWOOD AVE. CHICAGO 40 ILLINOIS

Bowman Builds a Body

Continued from Page 116

5. Interior Finish

The stainless steel flooring has been installed here. Edges at the sides and around the wheel housings are turned up four inches to eliminate the possibility of water creeping up the sides into the insulation. All joints will be welded to produce a water tight floor, sealed from the side structure at all points.

The plywood ceiling has been retained primarily to eliminate the rumbling which is characteristic of the steel ceiling. Wooden slatting will be installed horizontally with 11-in. around the entire inside of the body to protect the side structure from cargo damage.

6. Exterior Finish

The roof guttering and the stripping has been installed over the seams. This is attached with screws for the sake of simplifying replacement. The rubrail, made up of 12-gage tread steel has been set around the lower body section, being bolted to the body itself and welded into one integral section. The mudguard is of stock material, being pressed out to Bowman specifications at a local fabricator. This is the same type fender used on the delivery vehicles.

The construction of the doors (there is another on the other side) is similar to that of the body, being fabricated of metal over a wood

frame. Actually the lock and the body lights are the only units purchased as finished products in the entire body.

7. Interchangeable Fenders

Repair of the standard delivery bodies encompasses several Bowman short cuts that simplify inventory and reduce costs. This fender is made up of rolled steel and is of similar specifications to that used on the wholesale body. It replaces the standard fender and costs ap-

proximately 50 per cent less. In addition, use of this type guard reduces inventory and saves storage space.

8. The Finished Product

Here is the finished product—a tight, well-insulated, rugged 12-ft body for the wholesale fleet. Rounded corners, smooth lines and the functional construction makes this body ideal for this work.

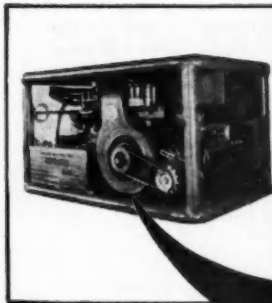
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Please Resume Reading Page 78

Dependable

POWER INSURANCE

for Reefer Cargoes



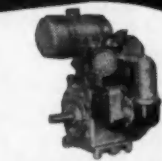
WISCONSIN HEAVY-DUTY AIR-COOLED ENGINE

Because no reefer cargo refrigeration unit is any more dependable than the engine that drives it, you can't put too much stress on the importance of specifying an engine that is completely reliable under all load and weather conditions.

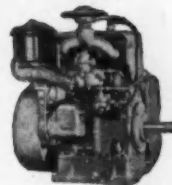
The Wisconsin-powered unit shown above, built by Tru Kooler, Inc., Oelwein, Iowa, maintains controlled temperatures to suit most exactly the cooling requirements of the refrigerated cargo... ranging from -10° F., to 65° F., with outside temperatures running as high as 120° F., or down to 20 below.

The power and condensing components can be conveniently mounted beneath the truck or trailer body, or over the cab, for simplified installation. These units are powered by Wisconsin Heavy-Duty Air-Cooled Engines of the most efficient size to fit the equipment and the job and are equipped with centrifugal clutches... designed to eliminate any load on the engine until proper speed and torque are attained. These engines are adaptable to either gasoline or bottled gas for fuel.

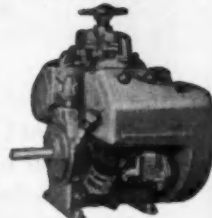
You can't do better than to specify "WISCONSIN" Power for your refrigeration units... your most dependable reefer cargo Power Insurance.



4-cycle single cylinder
3 to 9 hp.

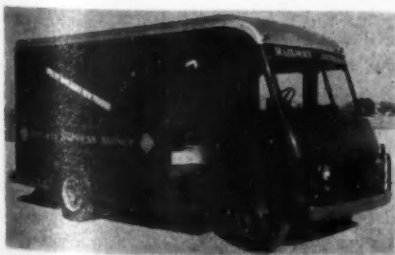


2-cylinder models
7 to 15 hp.



V-type 4-cylinder
15 to 36 hp.

New Body for REA



Above is the new body designed by Railway Express engineers and built by the York-Hoover Corp., York, Pa. It incorporates eye appeal with a required rugged stability necessary for the Express Agency's operating requirements. Bodies are being mounted on Dodge, Ford and GMC chassis.

COMMERCIAL CAR JOURNAL, June, 1955



WISCONSIN MOTOR CORPORATION

World's Largest Builders of Heavy-Duty Air-Cooled Engines
MILWAUKEE 46, WISCONSIN

A 8387

Experts Tell How to Up Spring Mileage

Continued from Page 94

if we could protect the surface, we could go a long way towards extending the life expectancy of the spring. While inter-leaf lubrication does not protect the tension surface of the main leaf, it does do much to protect the ten-

sion surfaces of the shorter leaves.

Rust or corrosion on the surfaces of the leaves, act like a "notch in a stick" to set up a concentration of stress in that area and starts a fracture which works

progressively deeper as the spring is repeatedly flexed and so eventual failure occurs.

The following reports showing the most economical mileage at which to replace springs are from bus operators. Buses usually operate over fixed routes, with fairly constant loads and operating conditions and they have usually been able to give more definite figures as to spring costs per mile than truck operators. However, operators of all types of commercial vehicles should be able to use these informed opinions, to apply these general principles to their own operations.

When to Change?

When to change springs is the subject of diverse opinions. Here are some interesting ones . . .

Mr. Ray H. Moore, Supt. of Equipment, Conestoga Transportation Co., Lancaster, Pa., reports . . .

"Back in 1941 and 1942 (during World War II) when spring steel was scarce, we were forced, in many cases, to have springs repaired — when they should not have been repaired. However, we worked pretty closely with a spring manufacturer and, through their efforts, we were able to secure some new springs.

"For some time after the war, these spring manufacturers still felt that we should continue repairing springs, instead of replacing them. But more recently, when we talked with them, we found that they have come over to our way of thinking.

"We found through experience that if a spring had only gone half its expected mileage, we could repair it satisfactorily. If there is question as to what we mean by 'half mileage,' we consider that the normal life of a spring (in our bus service) is between 70,000 and 100,000 miles. So we consider that 35,000 miles is a good 'half-way' point to establish. We found that when a spring had exceeded its half-way mark, it was more economical to replace it with a new one, rather than to repair it.

(TURN TO PAGE 124, PLEASE)

Are YOUR trucks among the 18½%* having defective brakes?

...need for smooth, concentric drum surfaces makes drum turning a must

*Percentage reported by Inter-Industry Highway Safety Committee based on 50,485 trucks examined.



Model 3000 Drum Lathe with
No. 3131 Cabinet
No. 3050 Grinder
No. 3450 Outboard Support
and Heavy Duty Adaptors

AMMCO SAFE-TURN LATHE rapidly reconditions drums 6" through 24" diameter and 7½" deep . . . handles dual wheels up to 600 lbs. Exclusive "Infimatic Feed" with .002" to .020" range is adjustable while cutting. Extra rugged construction includes tremendous 2½" Spindle and 3½" Cross Feed Support. Unit is easy to set up . . . simple to operate.

Write today for full details

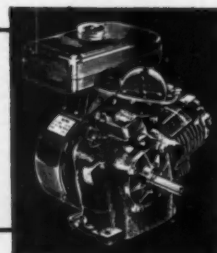
AMMCO TOOLS, INC., 2118 Commonwealth Avenue, North Chicago, Illinois.

THERE'S JUST NO END TO THE END USES OF CONTINENTAL RED SEAL® POWER

Within Continental's range, from two to 1,100 horsepower, it would be hard to name a type of engine-driven product—vehicle, aircraft, boat, or industrial machine—of which one or more of the leading makes do not rely today on Continental power. As might be assumed from the current trend toward greater specialization, the list of such applications is longer than ever before. The field of Red Seal usefulness has broadened to the point where—as this list suggests—there is almost no end to the industrial uses of dependable Continental power.

Air Compressors . . . Air Conditioners . . . Airplanes . . . Backfillers . . . Balers . . . Binders . . . Blowers . . . Buses . . . Bulldozers . . . Combines . . . Commercial Boats . . . Concrete Mixers and Pavers . . . Conveyors . . . Cranes . . . Crop Dusters . . . Derricks . . . Ditchers . . . Drill Rigs . . . Earth Borers . . . Earth Movers . . . Electric Welders . . . Elevators . . . Ensilage Cutters . . . Excavators . . . Farm Tractors . . . Gathering Pumps . . . Graders . . . Hay Loaders . . . Heavy Engine Starters . . . Helicopters . . . High Lifts . . . Hoists . . . Industrial Tractors . . . Irrigation Pumps . . . Loaders . . . Lumber Carriers . . . Materials Handlers . . . Oil Field Machinery . . . Parcel Delivery Trucks . . . Pile Drivers . . . Pipe Benders . . . Portable Generators . . . Rail Cars . . . Rollers . . . Rock Crushers . . . Saw Mills . . . Separators . . . Shovels . . . Snow Plows . . . Sprayers . . . Street Flushers . . . Street Sweepers . . . Threshers . . . Trainer Aircraft . . . Transit Mixers . . . Truck Tractors . . . Warehouse Trucks . . . Winches, and many others.

Continental also builds 4-cycle air-cooled models, from 2 to 3 h.p., for many industrial and farm applications, both conventional and vertical shaft. (AU series illustrated.) Advanced engineering gives them easy starting, high dependability, and unusual lugging capacity at low speeds. For information, address Air-Cooled Industrial Engine Div., 12800 Kercheval Ave., Detroit 15, Mich.

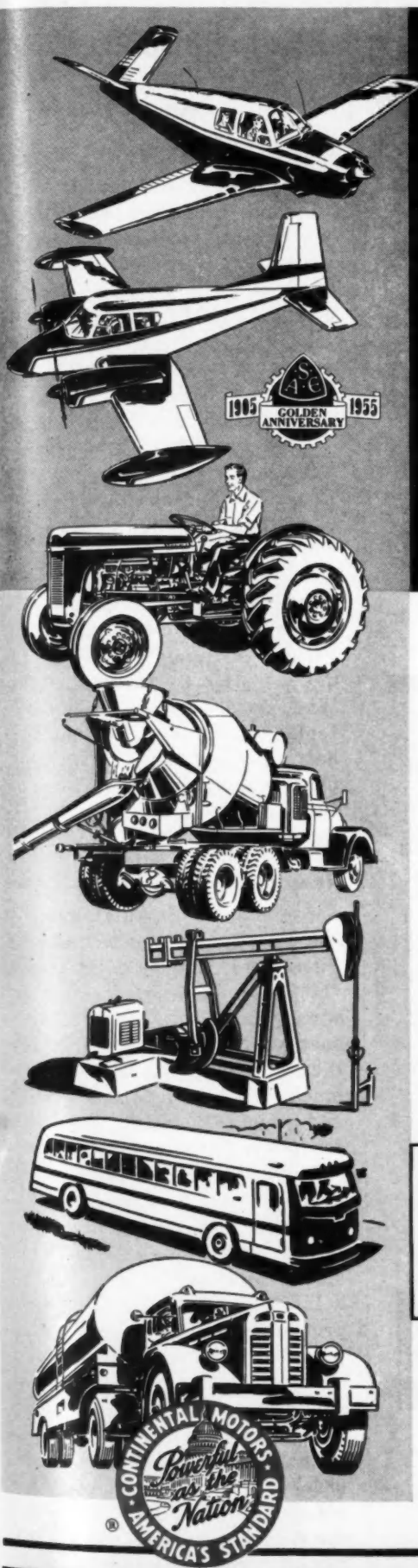


SERVICE FACILITIES AND GENUINE RED SEAL PARTS
ARE AVAILABLE EVERYWHERE

Continental Motors Corporation

MUSKEGON • MICHIGAN

6 EAST 45TH STREET, NEW YORK 17, NEW YORK • 6218 CEDAR SPRINGS ROAD, DALLAS 9, TEXAS • 3817 SOUTH SANTA FE AVENUE, LOS ANGELES 58, CALIFORNIA • 910 SOUTH BOSTON STREET, ROOM 1008, TULSA, OKLAHOMA • 1252 OAKLEIGH DRIVE, EAST POINT (ATLANTA) GEORGIA



For cost-cutting answers to
any door need, see these
TWO NEW CATALOGS!



Kinnear Steel Rolling Doors

With the coiling upward action of the interlocking steel-slat curtain, originated by Kinnear

Kinnear Rolling Fire Doors

All-steel "Akbar" Doors, famous for safety features and labeled by Underwriters Laboratories, Inc.

Kinnear Steel Rolling Grilles

A protective, attractive openwork of steel bars and links—admits light, air and vision

Kinnear Motor Operators

Special rugged motors for time-saving push-button door operation

Kinnear Rol-TOP Doors

Sectional upward-acting wood or all-steel doors with any number of panels for glass

KINNEAR
ROLLING DOORS

*Saving Ways
in Doorways*

**Write for Your
Copies Today**

FACTORIES IN COLUMBUS, OHIO and SAN FRANCISCO, CALIFORNIA

The Kinnear Manufacturing Co.

2100-20 Fields Avenue, Columbus 16, Ohio

Please send new Kinnear door catalogs to:

Name..... Title.....
Firm.....
Street.....
City..... Zone..... State.....

How to Up Spring Mileage

Continued from Page 122

"In 1948," continued Mr. Moore, "I went to Richmond, Virginia, where the spring problem was critical and it seemed that they were always replacing springs. But I found that they were having all springs repaired. We started replacing these springs with new ones, and our spring problem immediately disappeared.

"This condition was repeated again in 1951 (when I came to the Conestoga Transportation Co.) except that the conditions seemed worse than at our other properties. Here the repaired springs often consisted of all types of leaves, all points, flat points and parabolic. When repairing they did not stick to one type of leaf. When the change was made here to replacing springs (having over half mileage) with new components; we immediately saw results, and today we have very little spring trouble."

New Metal Needed

Agreeing with this idea, Mr. Joe Harvey, then manager of Pittsburgh Motor Coach, told us "If we don't keep feeding new spring metal into our bus spring suspensions from time to time, then our buses are riding on too much older and fatigued metal, and breakages occur with costly frequency."

Through the use of an "engineered spring program," the Blue Ridge Bus lines were able to effect a 300-per cent reduction in spring costs per mile!

In place of haphazard methods previously used (when springs were bought from five different sources and the orders were not sufficiently large to be important to any of these sources) the Blue Ridge Bus lines placed all their orders with one manufacturer, whose engineer made a study of the Blue Ridge buses and the particular conditions under which they were used. He then designed springs to meet these special con-

(TURN TO PAGE 128, PLEASE)

Moore, Virginia, was at they springs. We have d. We springs spring peared. repeated e to the Co.) ex-seemed proper-springs types of nts and g they of leaf. here to g over compo-saw re-very lit-

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an "engi-the Blue ble to ef-uction in

methods springs different were not important the Blue all their ufacturer. study of d the par-ler which n designed pecial con-LEASE)

, June, 1955



"From my personal experience I can tell you Auto-Lite STA-FUL Battery scores consistently for us," says Paul G. Viall of The Cleveland Cartage Co.

"STA-FUL is without exception the most dependable battery we've ever used. STA-FUL lasts longer, finishes stronger, keeps the fleet on the road. It helps us get our cost way down.

"There's no question about it here. For dependability our choice is Auto-Lite STA-FUL Battery."

P. G. Viall

Vice President of The Cleveland Cartage Company, Cleveland, Ohio. Mr. Viall's favorite relaxation is swimming in his family's private pool.



You're always right
with Auto-Lite

AUTO-LITE
BATTERIES

How to Up Spring Mileage

Continued from Page 124

ditions, and the plan of returning all springs to the manufacturer to be repaired—not more than twice—was adopted.

A somewhat different method of evaluating economical spring life expectancy was reported by Mr. C. A. Martin, then operating man-

ager for the Western Division of the Blue Ridge Transportation Co. of Washington, Pa., who, instead of replacing springs by mileage life, uses "number of repairs" as the determining factor.

Two Repairs Only

He reported that, as a rule, any spring could be profitably repaired at least once. But so few springs could be profitably repaired three times, that his company made it

a rule to replace springs with new springs rather than attempt to repair them the third time.

Their policy involves returning the spring to the manufacturer to be factory rebuilt when breakage occurs. The first time the spring is repaired, the numeral "1" is stamped on the top leaf, near the tie-bolt hole, to show that the spring has been repaired once. (Stamping the number near the tie-bolt hole does not weaken the spring for, if the U-bolts are kept properly tightened, the metal between them is clamped so tightly that no bending and consequently, no breakage will occur at this point. Loose U-bolt nuts are the predominant cause of middle breakage of leaf springs.

When the spring is repaired for the second time, the numeral "2" is stamped on the top leaf. When spring trouble eventually occurs for the third time, the spring is discarded, to be replaced by a complete new spring.

When a spring is returned to the manufacturer to be rebuilt, it is placed in a furnace to burn off the dirt and grease, so that the leaves can be properly inspected for surface checks and cracks. Each individual leaf is also "flipped over" on a steel plate, so that the inspector can tell by the sound, whether or not the leaf is cracked. When the estimated cost of repairing a spring exceeds 60 to 75 per cent of the cost of a new spring, the spring is not worth repairing and a new spring should be used.

While the spring manufacturer puts every leaf through the fire, so that the individual leaves can be fitted to each other when rebuilding (also to overcome sag), this low heat does nothing to restore the fatigue life of the re-used leaves.

END

Please Resume Reading Page 96

FATTY FLOORBOARDER, OUR BIG-FOOTED CITY DRIVER, SAYS: "YOU'N GIRLS OUGHT TO BE CAREFUL ABOUT GOIN' OUT WITH GUYS WHO WORK IN BANKS. THEY MAY BE TELLERS."

COMMERCIAL CAR JOURNAL, June, 1955



Model 287 Driver's Seat



Model 230 Driver's Seat



Special Model 230 Driver's Seat with arms

Truck and Bus
Manufacturers add
sales appeal by
standardizing on

American Seating
**DRIVER'S
SEATS**

No. 0-4418 Light Delivery Tilt-Away Truck Seat

Write for
our latest
illustrated
catalog!



American Seating Company

WORLD'S LEADER IN PUBLIC SEATING

Grand Rapids 2, Michigan • Branch Offices and Distributors in Principal Cities
Manufacturers of Transportation, School, Theatre, Auditorium, Church,
Stadium Seating, and FOLDING CHAIRS

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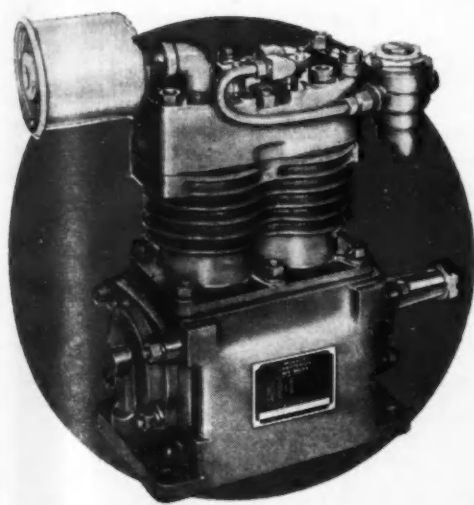
g Page 96

OUR BIG-
AYS: "YOU'N
REFUL ABOUT
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ELLERS.

AL, June, 1955



"150,000 Miles without an overhaul... You just can't beat a MIDLAND Compressor!"



"Smartest thing the boss ever did was standardize on Midland Compressors. Never any oil pumping with them...and man, the miles of good performance they turn in without an overhaul!"

That's Right—Midland Compressors are known by truck and bus operators the world over for their positive, economical performance and their ability to really take it for thousands and thousands of miles without the need for servicing. Midland Compressors give you these big advantages:

Greatest Efficiency—Due to patented automatic inlet valves built into cylinder head.

Minimum Oil Consumption—Due to lack of high vacuum on suction stroke.

Cooler Operation—Because inlet valves let atmospheric air circulate

through compressor when idling, practically eliminating carbon.

Integral Governor—Governor mounted on compressor simplifies installation.

Less Weight—A very important factor for today's operators.

Reduced Maintenance—Lack of compressor oil pumping greatly reduces maintenance due to elimination of oil and varnish deposits throughout the entire brake system.

♦ ♦ ♦
For complete details, see your nearest Midland dealer—or write factory direct.

MIDLAND

STEEL PRODUCTS CO. INC.

2441 E. Milwaukee Ave., Detroit 11, Michigan
Export Department: 33 Canal Street, New York, N. Y.



Those Who Know
Power Brakes
CHOOSE MIDLAND!

Fleetman's Library

Continued from Page 88

Made available by Fuller Mfg. Co., here is a preventive maintenance wall chart covering conventional five-speed transmissions. It was developed specifically for truck fleet operators.

It covers all transmission checks from the hand brake lever assembly to splines on the output shaft. Sections of the new chart include checks (1) without partial disassembly of

chassis or cab, (2) with floor boards removed, (3) with drive line dropped, and (4) with drive line dropped and with universal joint companion flange removed.

Fully identified drawings of the transmission and its parts are featured. For your free copy, circle L5 on the postcard on page 84.

Divco has a new folder describing its new squared-up bodies said to provide more headroom and useable inside space, more complete and proper insulation, greater resistance to rust

and corrosion, better load distribution and easier servicing. For a free copy, circle L6 on the postcard on page 84.

Brown Trailers has just released a folder on its new Series H stressed skin or exterior post units available as van, open-top, grain, double-bottom or step-floor semi-trailers. Circle L7 on the postcard on page 84 for your free copy.

Skil Corp.'s portable power tools are described in this new catalog. It covers over 150 models of electrical and pneumatic saws, drills, grinders, planes, sanders, blowers, drivers, runners and shears, together with related accessories. Circle L8 on the postcard on page 84 for your free copy.

Industrial trucks including both gas and electric models and describing platform trucks, fork lifts, crane trucks, etc., made by Baker-Raulang Co. are covered in this 8-page folder. You can get a copy by circling L9 on the postcard.

Truck mufflers made by Stemco Mfg. Co. for most all truck models are listed in this free folder you can get by circling L10 on the postcard on page 84.

All-wheel-drive Fords produced by Marmon-Herrington in over 80 models for many diversified uses are illustrated and described in this new folder. Circle L11 on the postcard for a free copy.

Engine and carburetor tune-up for gasoline engines are completely covered in this 24-page, 8½ x 11-in. booklet from Standard Motor Products. It is fully illustrated and includes detailed material on the various carburetor circuits—choke, pump, low speed, high speed and power system. For a free copy, circle L12 on the postcard on page 84.

Air and electric-powered tools made by Ingersoll-Rand are covered in this new catalog. It includes actual case histories on how savings are possible using these tools for running nuts, bolts, cap screws, etc. Circle L13 on the postcard for your free copy.

Oil filter refill installation is covered in this 16-page booklet just published by Purolator Products, Inc. Circle L14 on the postcard for your free copy.

Thermostats made by Flexonics Corp. are described in this new catalog along with a new "pressure compensating" thermostat for pressure cooling systems. For a free copy, circle L 15 on the postcard.

END

Please Resume Reading Page 90

COMMERCIAL CAR JOURNAL, June, 1955



STOP WASTING GASOLINE!

USE A
HANDY
GOVERNOR

KS

KING-SEELEY CORPORATION
ANN ARBOR, MICHIGAN

Rugg

The Ansul 10...
beating of...
extinguisher...
test without...
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10-pounder

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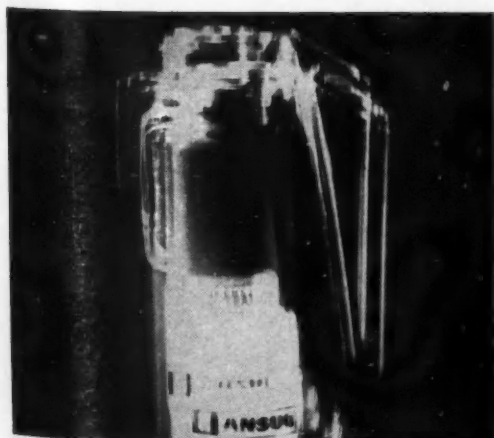
Rugged 10-lb. Ansul fire extinguisher built for truck protection

The Ansul 10-pounder is *designed and built* to take the beating of year-in, year-out truck use. This new extinguisher survived a 250-hour vibration-impact test without a single part failure. Ansul engineers estimate that this test was the equivalent of 10 years' hard road use.

Ansul's "Plus Fifty," the dry chemical extinguishing agent used in the 10-pounder, makes short, fast work of engine fires, tire and brake lining fires and cargo

fires. The high fire killing rating (B1, C1) of this unit gives full fire coverage the instant it's needed.

A serious truck fire results in lost operating revenue, makes it difficult for you to provide "on-schedule" service for your customers. Your local Ansul Man can show you how a fire protection plan for your fleet can avoid costly truck and cargo losses and help to maintain your reputation for dependable service. Adequate fire protection is the best fire insurance you can buy.

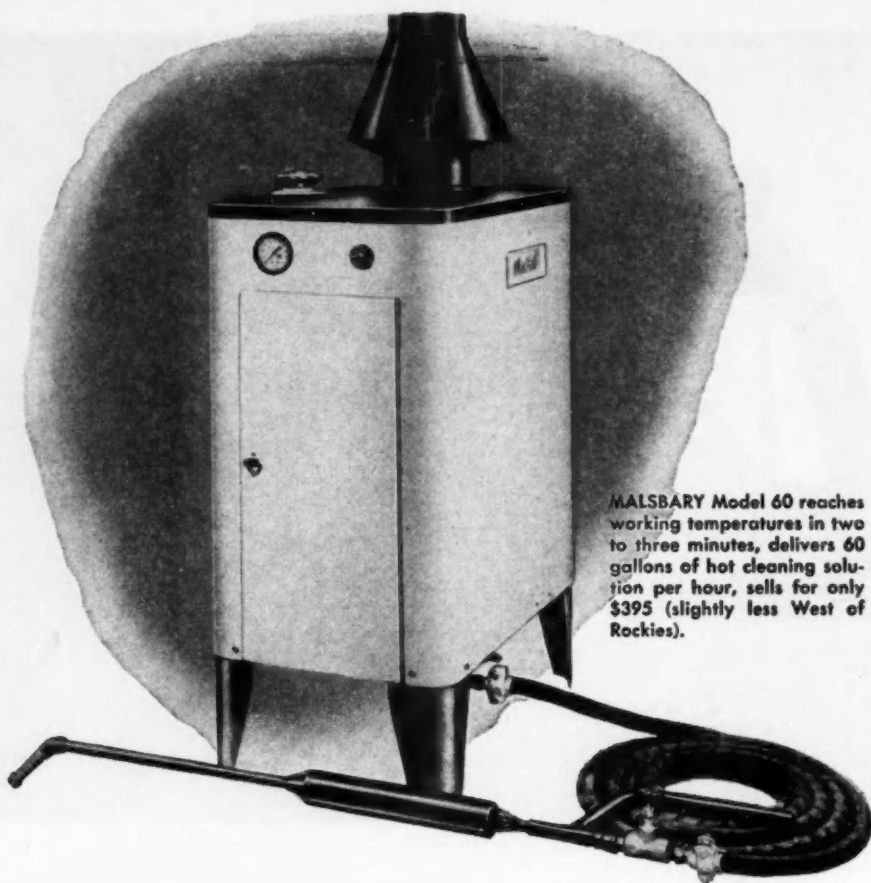


The vibrator-impact machine puts Ansul 10-pounder through 250-hour torture test.

Call the Ansul Man!

Get in touch with your local Ansul Man through the "yellow pages" or write Ansul Chemical Company, Fire Equipment Division, Dept. F-66, Marinette, Wisconsin. Write Ansul for your copy of new Fire Equipment Catalog.





MALSBARY Model 60 reaches working temperatures in two to three minutes, delivers 60 gallons of hot cleaning solution per hour, sells for only \$395 (slightly less West of Rockies).

NOW FOR HANDY, IN-SHOP STEAM CLEANING, Malsbary 60 — Only \$395

New Malsbary 60 steam cleaner, built specifically for parts cleaning and other light work, is so small you can install it right in the shop for use on individual repair jobs.

Job studies show mechanics spend 30-40% of their working time wiping grease and muck off parts before they can get down to repair work. With the MALSBARY 60 you can eliminate this hand wiping. Mechanics can use it right at their jobs to quickly steam clean away grease, oil and dirt as they go about their regular repair work.

Malsbary 60 is nozzle controlled, simple as a wrench to use. Mechanics can pick up cleaning gun, have hot solution instantly, because burner goes on instant cleaning nozzle valve is opened; shuts off automatically when valve is closed. There's no running back and forth to start and stop flow of cleaning solution; no carrying of parts to special cleaning area. You quickly save the \$395 cost in mechanics' time alone.

Malsbary 60 works directly off any water main where water pressure is 60 pounds or more...without using a pump. For those few areas where water main pressure is below 60 pounds, MALSBARY makes available a pump and motor assembly which adds 50 p.s.i. to water main pressure. Thus, if pressure from main is 40 p.s.i., you get a 90-pound cleaning stream by using this pump. Pump and motor assembly, ready to bolt to cleaner, \$90 delivered.

Burner uses low pressure natural gas, butane, propane or manufactured gas. Special safety control automatically shuts off burner if water flow is interrupted.

Ask your jobber to install at least one Malsbary 60 in your shop NOW... prove to yourself how it saves mechanics' time.



Room K6, 845-92nd Ave., Oakland 3, Calif.

Fleet Training Courses

HERE is 1955's calendar of fleet training courses. For complete addresses to write to for full information about the courses, see COMMERCIAL CAR JOURNAL's November, 1954, issue, page 237.

Fleet Supervisor Courses

- June 20-24—University of Virginia.
- June 20-24—Northwestern University (Illinois).
- Aug. 22-26—University of Louisville (Kentucky).
- Sept. 12-16 — Pennsylvania State University.
- Sept. 19-23 — Purdue University (Indiana).
- Oct. 31-Nov. 4—University of Minnesota.
- Nov. 14-18—University of Michigan.
- Nov. 28-Dec. 2—University of Akron, Ohio.

Driver Training

- North Carolina State College (one month long courses starting July 4, Aug. 1, Sept. 3, Oct. 3, Oct. 31, Nov. 28).

Terminal Management

- Oct. 11-13 — Pennsylvania State University.
- Dec. 7-9—University of Tennessee.

Top Management Conferences

- Sept. 29-30 — Pennsylvania State University.

Fleet Maintenance Courses

- Oct. 10-14 — Rutgers University (New Jersey).
- Oct. 10-14—Tulane University.
- Nov. 1-3—Oregon State College.
- Nov. 7-9—Montana Motor Transport Assn. (Billings).



"It sure was a great game. Too bad we had to leave before it was over!"

COMMERCIAL CAR JOURNAL, June, 1955

Problems of lower frames other modern designs...

Dana engine problems are developed different

Dana engine propeller shaft result of overrated the axle... and Spicer every type of Ask Dana to

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Too bad we
s over!"

June, 1955

Problems of prop-shafts as related to lower floors . . . lower frames . . . engine angle . . . axle alignment . . . and other modern developments in motor, chassis and body designs . . . are welcomed by Dana.

Dana engineers are working on today's propeller shaft problems with every passenger car manufacturer, and are developing efficient Spicer designs to cover many different and complicated requirements!

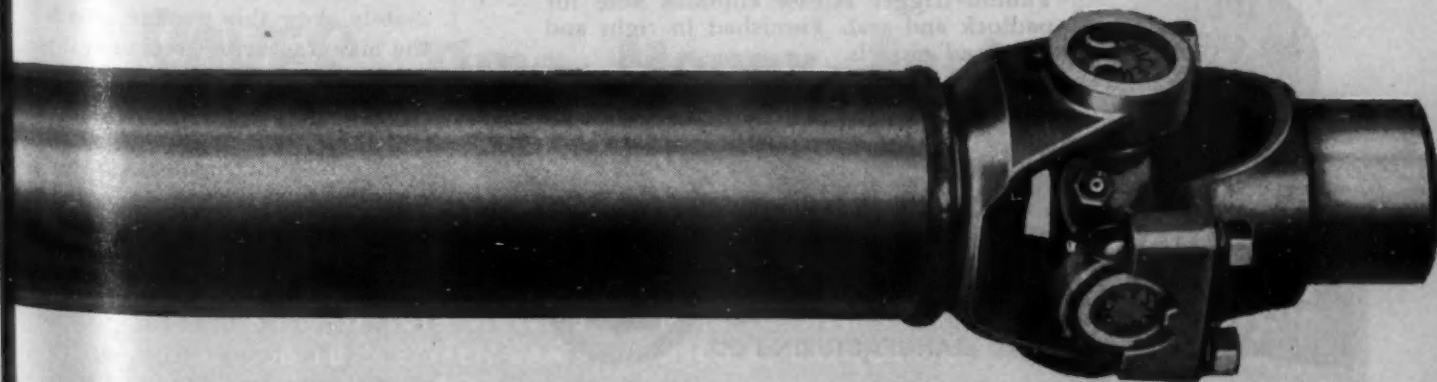
Dana engineers have accumulated an invaluable fund of propeller shaft and universal joint design knowledge . . . the result of over 50 years experience in this field. Spicer originated the automotive universal joint and propeller shaft . . . and Spicer products have been built into practically every type of motor vehicle that has been manufactured.

Ask Dana to help solve your prop-shaft problems!

Fred

We've got to lower
that prop shaft
— better
call Spicer!
Ben

present floor level
We must drop
level to here



TOLEDO 1, OHIO

SPICER PRODUCTS: TRANSMISSIONS • UNIVERSAL JOINTS • PROPELLER SHAFTS • AXLES • TORQUE CONVERTERS • GEAR BOXES • POWER TAKE-OFFS • POWER TAKE-OFF JOINTS • RAIL CAR DRIVES • RAILWAY GENERATOR DRIVES • STAMPINGS • SPICER AND AUBURN CLUTCHES • PARISH FRAMES

The Ultimate in Parts Life

Continued from Page 79

years), since the foreman can go to the files and find out exactly what unit is in the vehicle in trouble, eliminating in many instances the necessity of making a trip out to check first.

Still another indirect benefit is derived in this way. The longer

the system is in force, the less mechanics depend upon their memory or intuition, and the more they depend upon the written record. This eliminates tendencies which are bad practice and insures notice of practices which are good. By the same token it

gives the supervisory personnel a constant check on the efficiency of the individual men under them, allowing them to correct faults they might not otherwise notice. And above all it creates confidence, since having the record at his fingertips eliminates most of the guesswork in maintenance.

The Changes Made

Unnecessary and bad practices eliminated during the past two years at Fortier include the following:

Steering gear boxes are now filled every 3000 miles instead of every 1500, as formerly. By using pressure release grease fittings on their water pumps, Fortier finds it is only necessary to grease at 3000 mile intervals. On the other hand, it was found that by draining all gear boxes and checking the oil for flakes, as well as checking the carrier bearings, at 30,000 miles it is possible to get the maximum (200,000) miles from them. And by insisting that no wheel bearing found loose shall be simply tightened, but instead ordering that it be taken off, examined, adjusted and then packed before replacing it, Fortier finds it is unnecessary to pack wheel bearings oftener than every 100,000 miles.

Of still another advantage, officials at Fortier prefer not to speak at length, but they will say that the unit numbering system shows up part weaknesses to a degree that often allows the maintenance department to catch manufacturer weaknesses before they can do any great damage. For instance, suppose that a particular series of parts, say gears, are brittle. This series will break teeth, and the unit numbering system will immediately show this weakness up for the manufacturing weakness it is. The parts department can therefore be warned not to stockpile this particular series, and the maintenance department can work with the manufacturer to clear up the problem quickly.

Kardex Simplifies Filing

The trouble with maintenance records in many instances, Mr. (TURN TO PAGE 140, PLEASE)

For Maximum Payload Space

WITH GREATEST

LEGAL WIDTH, USE
No. 5660

FLUSH TYPE LOCK

The SPECIAL RECESSED FEATURE of this new flush-type lock permits building the vehicle to the GREATEST LEGAL WIDTH for MAXIMUM CARGO SPACE, on side door installations.

The new **E** No. 5660 lock embodies all the excellent features of the popular

"Clamptite" and Eber-"Grip"-Hard locks used to great advantage by body builders everywhere. Built for long service life with smooth, positive cam-closing action. Thumb-trigger release contains hole for padlock and seal. Furnished in right and left hand models.

Write
for CATALOG
and Full
Particulars

EBERHARD Long Run
TRUCK BODY FITTINGS

EBERHARD MANUFACTURING CO.

Division of the Eastern Malleable Iron Co.

EVARTS AVENUE

CLEVELAND, OHIO

ADC* Oilprint Analysis

CHECKS CRANKCASE OIL IN MINUTES

Shell Research gives you new
oil-change yardstick—

Now—operators can test crankcase oil in the short time allotted for refueling and crankcase oil checks. The Shell ADC Oilprint Analysis gives a practical and accurate oil evaluation in minutes.

ADC Oilprint Analysis means big savings when used in your preventive maintenance program . . . gives valuable information on engine and oil

conditions. It answers the question "When do I change my oil?" thus eliminating the draining of usable oil and the risk of using oils loaded with contaminants.

See for yourself how the new Shell ADC Oilprint Analysis can save you real money in preventive maintenance. Let us demonstrate how you can use this new service for your fleet.

SAVES... Time, Money, Engines, Oil

*Trademark

SHELL OIL COMPANY,

50 WEST 50TH STREET, NEW YORK 20, NEW YORK
100 BUSH STREET, SAN FRANCISCO 6, CALIFORNIA



The Ultimate in Parts Life

Continued from Page 136

Royce C. Blood, coordinator at Fortier, believes is that they wind up on the boss's desk about 30 days after the event. There they wait on an average of another 15 days before the boss gets around to studying them. Then it is still another 15 days before he has time

to do anything about what he discovers in the records. This all adds up to some 60 days, and in many instances it is now too late—the money's been wasted, the units ruined, the mess has been corrected, and the boss is again 30 to 60 days behind what's going on at the moment.

At Fortier they have tried to avoid this by simplifying their record keeping, and by ruthlessly getting rid of records which do

not carry their own weight. The result is a filing system of extreme simplicity and usefulness. One which the floor personnel use daily.

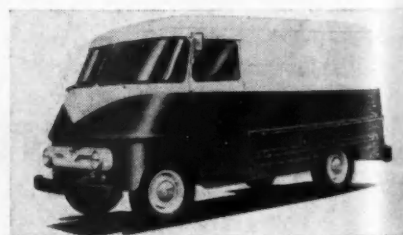
The heart of Fortier's filing system is the Kardex. Here all vehicles are filed numerically, with all numbered units in each vehicle included on the vehicle card, as well as information about certain unnumbered units. A glance at this file will tell the foreman in an instant what transmission is in what vehicle, how many miles the transmission has run, when it was last pulled and what vehicle it was previously in. It will give him the same information on the engine, cylinder heads, fuel pumps, differentials, starter, generator and fifth wheel.

Should he feel the need of additional information about any numbered unit, he can walk to the unit file, where each unit has a folder which contains every bit of information available about the particular unit he is interested in. Both these files, plus a third open file which keeps track of units being worked on and in stock, are kept in the maintenance office, which is located just off the maintenance floor, where it is handy for the floor personnel's use.

Using the Record

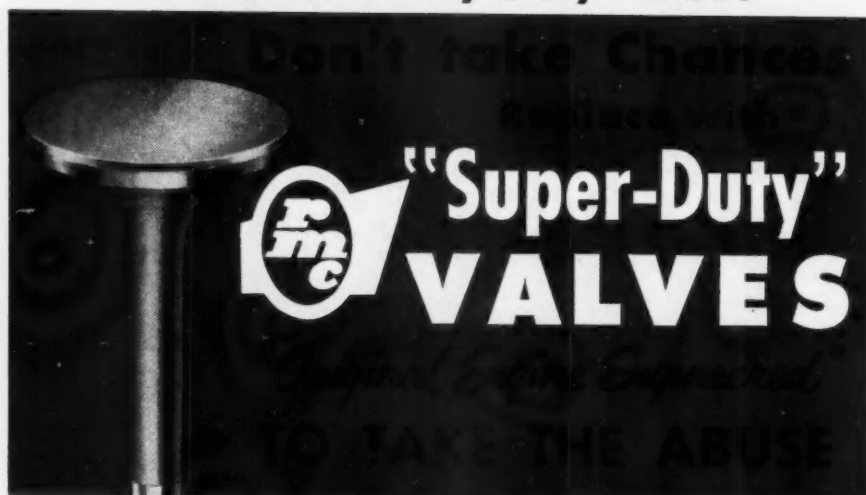
Here is an example of how this works. A vehicle, say number 2257, comes into the shop with a main
(TURN TO PAGE 142, PLEASE)

Ford with Utility



Utility Truck Distributors, Inc., Union City, Ind., has announced bodies for 1955 Ford truck chassis. Delivery of Utility Bodies on Ford Chassis will be started on April 15. Both general delivery and special bodies (standard) are available. Special units include: dairy, bakery, bus-type, laundry and custom bodies. All units are available in 8, 10 and 12-ft.

Heavy Duty Engines Demand Heavy Duty Valves



OFFERING THESE ADVANTAGES:

- TWO PIECE (Bi Metal) EXHAUST VALVES with Austenitic Steel heads
- STELLITE FACES for better seating under extreme operating temperatures
- HEAT BANDS, if required—help cut burning to a minimum.
- BUILT TO ORIGINAL EQUIPMENT SPECIFICATIONS by a leading ORIGINAL EQUIPMENT Supplier
- COMPRESSION ENGINEERED for today's high compression engines
- GUARANTEED TOP-QUALITY by one of the best known names in the Automotive industry

Look for THIS SEAL on THE BOX—Your assurance of better Heavy Duty performance

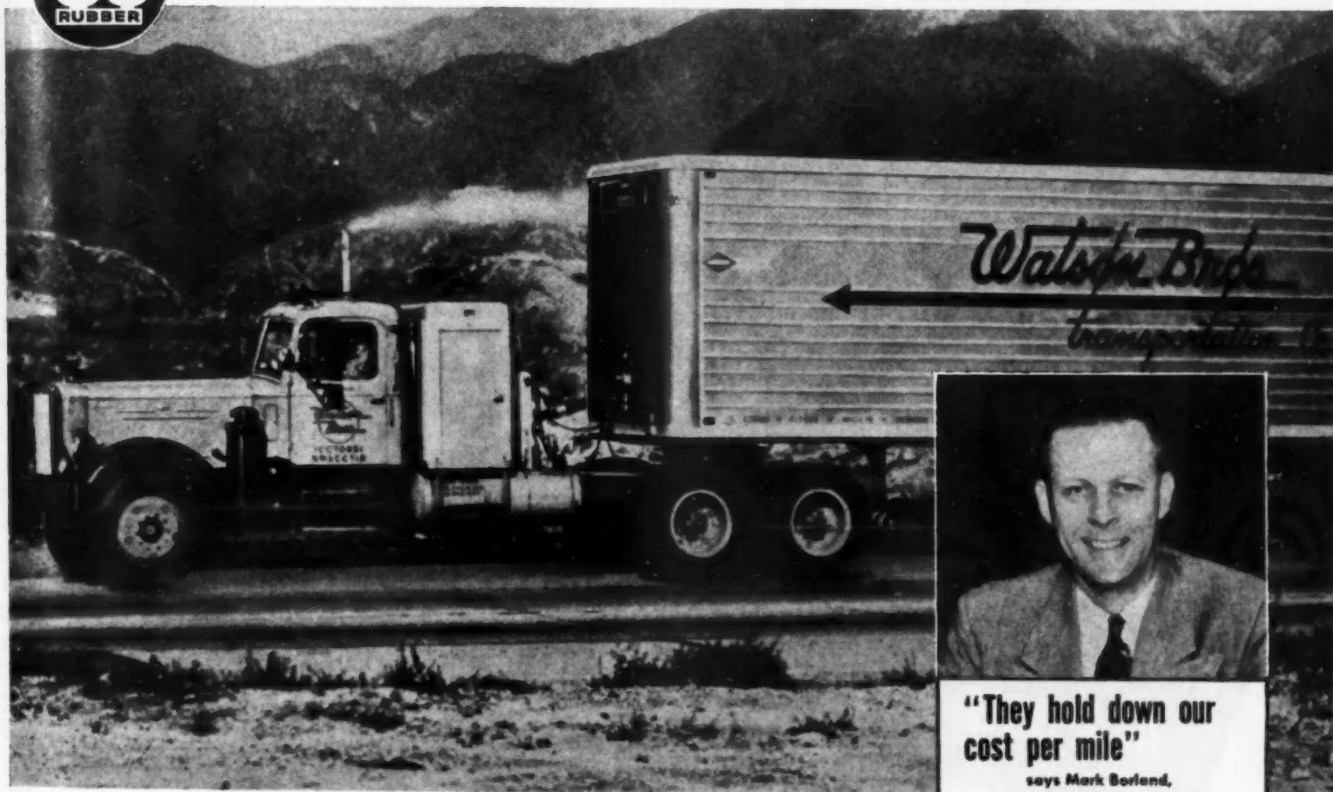
Sold by better Automotive Replacement Parts Jobbers, everywhere.



RICH MANUFACTURING
BATTLE CREEK
MICH., U.S.A. *Corporation*



United States Rubber Company 4-year truck tire project pays off—
leading truckers report they're well ahead with U. S. Royal!



**"They hold down our
cost per mile"**

says Mark Berland,
Watson Bros., Omaha, Neb.

"We have just finished a thorough review of our operating expense records. They show conclusively that U. S. Royal Fleetways are a major factor in holding down our cost per mile. From these tires, we get from 85,000 to 120,000 miles on original tread, plus 2 to 4 recaps."

Far Lower Cost Per Mile!

Maintenance records of leading truckers like Watson Bros. are evidence that the new tires resulting from U. S. Royal's 4-Year Truck Tire Project are appreciably lowering cost per mile.

Exclusive U. S. Royal developments are responsible for these cost reductions. New *Hot-Processed* rubber compounds produce tougher treads, slower tread wear. Patented *Infra-Red Ray Treatment* prevents groove-cracking. Special

Royal Processing pre-stretches carcass cord to reduce tire "growth", increase recappability.

Today—whatever *your* trucking job—there are U. S. Royal Tires that will lower your cost per mile, while assuring you of much less downtime and far more mileage. Have your U. S. Royal Dealer put them on your trucks—prove for yourself why truckers like Watson Bros. report they're *well ahead* with U. S. Royal!

U.S. ROYAL TRUCK TIRES



ASK YOUR U. S. ROYAL DISTRIBUTOR TO SHOW YOU THE NEW FILM ON BETTER HIGHWAYS: "MEMO TO MARS"

COMMERCIAL CAR JOURNAL, June, 1955

The Ultimate in Parts Life

Continued from Page 140

transmission that's bad. The foreman goes to the Kardex before tearing the transmission down, sees from the card there that MT 215 is in this vehicle, and that it has run a certain number of miles since it was last pulled. If there is anything unusual about this

unit, he then goes to the unit file, pulls the folder for MT 215 and studies it thoroughly. In either case he then returns to the floor, where he makes out a unit record card in triplicate and assigns the unit to a mechanic. One copy of this report is now sent to the maintenance records office, where the clerk files it in the open file, indicating that it is being worked on. At the same time the clerk notes on the vehicle card that MT

215 has been removed and which unit has replaced it.

When unit MT 215 is repaired, the mechanic who has done the work signs the two remaining record slips, putting the information as to what was done, etc., on these slips. One of the slips is then sent to the records office, where it replaces the slip in the open file, indicating that the unit is now repaired and in stock, while the other slip is placed in a grease proof envelope and wired to the unit, where it will stay until this unit is taken from stock. At that time the slip will be sent to the records office. There the clerk will record the information that the unit has been placed in such and such a vehicle. At the same time he will pull and destroy the slip in the open file (indicating the unit was in stock) and file the last slip he has just received in the unit file.

The entire filing system used at Fortier could well fit into one corner of a small office, yet it does the job with complete satisfaction.

END

Please Resume Reading Page 80

Imperial's NEW complete line Brings You Everything You Need in PUSH-PULL CONTROLS

The only line with
STAINLESS STEEL
WIRE

IMPERIAL now offers you the MOST COMPLETE LINE of push-pull controls in the service market — including Heavy-Duty and Self-Locking Vernier Types. Provides controls for operating Power Take-Offs, Hydraulic Valves, Tail Gates and Pumpers on tractors, dump trucks, earth-moving equipment, tank trucks, etc.

And you get the finest Throttle, Choke, Hood Release and Locking Controls built! Only IMPERIAL Hi-Duty Push-Pull Controls are equipped with STAINLESS STEEL WIRE that assures against rusting, eliminates need for lubrication.

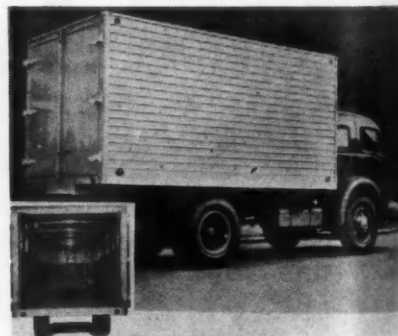


THE IMPERIAL BRASS MFG. CO. 1209 W. Harrison Ave., Chicago 7, Ill.
In Canada: 334 Louder Ave., Toronto, Ontario

IMPERIAL

Brass Fittings • Flexible Lines • Shut-Off Valves
Service Aids • Drum Faucets • Tubing Tools

All-Aluminum by Fruehauf



This new all-aluminum truck body to be known as the Cargo*Star model is just announced by the Fruehauf Trailer Co. It will be available in 13 lengths ranging from 12 to 24 ft in one inch increments. It may be had in either smooth panel, outside post, or beaded panel design at no extra cost. Two optional heights are offered, one, 6 ft 7½ in. and the other, 7 ft. Standard outside width of the body is 91 in. A full 8 ft width will be offered for a slight increase in price. Standard options include side doors, rear doors, wheelhouse kits, tailgates, scissor gates, chain gates, hardwood floor, composite floors, dry freight extruded aluminum floors, rub-rail kits, combination platform extension, rear dock bumper and step.

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June, 1955



Steel Wool



Masking Paper



Plastic Tape



Abrasives

"Strips off clean"



Dale Horner
 J. Killeen
 San Francisco, California



PERMACEL[®] TAPE

AND REFINISHING SUPPLIES

• Johnson-Johnson company

COMMERCIAL CAR JOURNAL, June, 1955

Training-Incentive Raises PM Standards

Continued from Page 71

bus, he is prepared. Because we are so safety conscious at Muny, a fire extinguisher is an important part of this kit.

Until a better method of inspection and checks comes along, we will stick by the mileage replacement program. However, we may

have that answer, too. Already I am working on an instrumentation check that will help us to determine engine condition without going into it. Experiments now being conducted on some of our vehicles will soon show whether we can rely on instrument tests to

determine wear and maladjustments. It looks now as if the new plan will be ready for installation right across the board within a few months.

Why Failure?

We are quite concerned when a unit does fail in service. We want to know all details so that a study can be made. At such times a "Motor Failure Information" sheet is filled in by the foreman to show such details as date, location, driver, last inspection, last service and name of the mechanic who called. We want to know exactly what he found and we want to know the cause of the failure. That's the foreman's responsibility and until he can arrive at the answer he is on the pan.

Our foremen are assigned special responsibilities in addition to their regular duties. For example, one man is a brake specialist. As such he is responsible for special assignment on brakes at any time a series of troubles arises. Thus he may spend a week or several weeks tracing down squeal, heating, or unsatisfactory stopping distances. Another foreman is an electrical and battery specialist and as such makes periodic checks of these units to be sure we are getting the most efficient service from them. Another foreman is in charge of labor schedules and in this capacity relieves me of a lot of details in assignments. So when a rash of troubles break out, we get on them pronto. And the campaign lasts until we have found the answer. This type of inspection and follow-up has proven remarkably effective at Muny.

In Service Checking

We require these foremen to spend one day a month riding equipment and looking for trouble. Each spends any spare time in looking for items that may have been missed in the regular inspection. During these trips he checks on heating, riding, engine or chassis noises, interior conditions such as dirty ceilings or worn seats, etc. This serves as a double check against the shop and catches many impending failures.

(TURN TO PAGE 148, PLEASE)

COMMERCIAL CAR JOURNAL, June, 1955

Cut fleet
maintenance
and repair
time in
half with...



SERIES "1800"
HYPPRESSURE

Jenny

NEW MODEL "1809"
Hypressure JENNY.

**STEAM CLEANER
and STEAM THORO-PURGE**

Cost-conscious Fleet Operators welcome the powerful new Series "1800" Hypressure Jenny Steam Cleaners as the keystone of their fleet maintenance program. Features, such as: output of 180 gallons of boiling hot cleaning solution per hour; capacity for two cleaning guns; finger-tip choice of flushing and rinsing volume up to 480 gallons per hour; automatic electric ignition; and instant steaming, make "1800" Series Jennys the chief cost-cutting tool for your service shop.

With Steam Thoro-Purge, an optional accessory, Jenny will even reverse-flush complete cooling systems (radiator, motor block and heater) and guarantee a better job than you can get by any other method! Let Hypressure Jenny with Steam Thoro-Purge help increase your profits, by cutting fleet maintenance time in half.

For full particulars, MAIL THE COUPON TODAY

Without obligation on my part, send full facts about ☐ new Series "1800" Hypressure Jenny; ☐ Steam Thoro-Purge.

NAME _____ TITLE _____

COMPANY _____

ADDRESS _____

CITY _____ STATE _____

HYPRESSURE JENNY DIVISION

HOMESTEAD VALVE MANUFACTURING COMPANY

P. O. Box 90

Coraopolis, Pa.

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Chevrolet's modern, sh

All six new V8—are sp system. Th in cold we The high-c head engine you running

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PLEASE)

, June, 1955



Money Can Buy!

Chevrolet's new 145 h.p. Taskmaster V8—the most modern, shortest-stroke V8 in *any* truck!

All six new Task-Force engines—including the new V8—are sparked by an extra-husky 12-volt electrical system. That means snap-of-the-finger starting even in cold weather, besides greater generator capacity. The high-compression power of these great valve-in-head engines cuts down on operating costs . . . keeps you running longer between gas stops.

Anything else? Plenty. Capacities go all the way up to 18,000 lb. G.V.W.—available in 2-ton models. Enough G.V.W. for practically any job! Frames are new—of 34-inch standard width to accommodate

special bodies, and with more rigid, completely parallel side members. And there's new suspension, front and rear, to make the road a lot easier on the load.

Tubeless tires are included on 1/2-ton models at no extra cost. Power Brakes are standard on 2-ton models, optional at extra cost on others. All models except Forward-Control are available with Power Steering as an extra-cost option. New Overdrive is now available on 1/2-ton models, optional at extra cost; Hydra-Matic, on 1/2-, 3/4- and 1-ton models. There's more still, but call your Chevrolet dealer for complete details. . . . Chevrolet Division of General Motors, Detroit 2, Michigan.

Task-Force TRUCKS

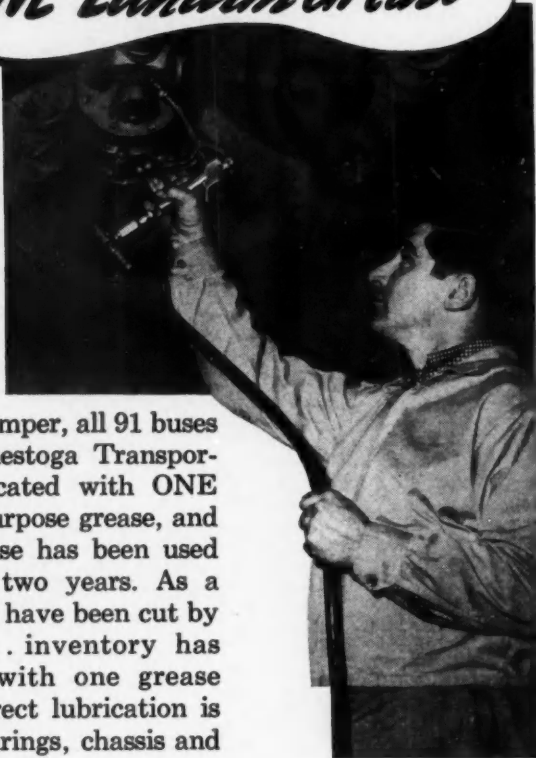
COMMERCIAL CAR JOURNAL, June, 1955

Foote Lithium Does It!



R. H. Moore,
Superintendent of Equipment,
Conestoga Transportation Co.,
Lancaster, Pa.

*"We've Cut
Grease Costs
Over 100% with
ONE Lithium Grease"*



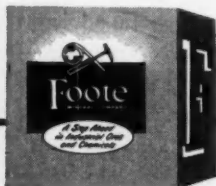
From bumper to bumper, all 91 buses operated by the Conestoga Transportation Co. are lubricated with ONE lithium base, multi-purpose grease, and this one lithium grease has been used exclusively for over two years. As a result . . . grease costs have been cut by more than 100% . . . inventory has been reduced, and with one grease instead of three, correct lubrication is assured for wheel bearings, chassis and universal joints.

This is typical of the outstanding performance and savings with lithium grease reported by bus companies, fleet operators and heavy equipment owners all over the country. Why? . . . because a lithium grease combines water resistance with positive lubrication at temperatures ranging from -50°F. to over 350°F.

It will pay you to contact your grease supplier for information about lithium base, multi-purpose lubricating grease.

You'll keep 'em rolling at lower cost per mile with ONE lithium grease.

We will be glad to send you a copy of "Front Wheel Bearing Lubrication," an N.L.G.I. report.



LITHIUM HYDROXIDE
FOR INDUSTRY

FOOTE MINERAL COMPANY

445 Eighteen W. Chelton Bldg., Phila. 44, Pa.

RESEARCH LABORATORIES: Berwyn, Pa.

PLANTS: Exton, Pa.; Kings Mountain, N.C.; Sunbright, Va.

Training-Incentive Plan

Continued from Page 144

We have set up inspection clinics which meet once a month during which time the men exchange ideas and get special instruction in new or improved methods of maintenance. Here is where I help to put across ideas picked up at various maintenance meetings that I think might be applied profitably to our service. In meetings of this type I can get support for new procedures (or changes and improvements from the men) and I can be assured that each man is pulling for me when he leaves the class.

We feel that it is very important to develop these attitudes before pulling some new gimmick on the maintenance department. These clinics are set up for the foremen on company time and while they represent several man hours in class time, they pay off in better cooperation and more accurate work out there in the shop where it shows.

Instruction and Training

Another important phase of our instruction is the visual educational program set up for safety instruction as well as maintenance. We have over \$1800 worth of equipment in slides, movies, projectors and mock-ups designed to make safety work for us. I find that the way to get attention is to: (1) make it interesting; (2) make it practical; (3) make it tie in with the man's personal interest in improvement.

In this training we rent, borrow or purchase outright films on safety or maintenance. Drivers as well as mechanics usually attend these safety sessions. Subjects range from the relatively simple procedure of changing a filter to overhauling an injector and from opening a bus door to handling a coach with a blowout. We like dramatic presentations when they handle the situation without preaching. For example, the men recently saw the film "Gamblers," a short on jacking and blocking

(TURN TO PAGE 150, PLEASE)

FRAM

CUTS COST PER MILE



It's a fact fleet operators prove every day! FRAM Cartridges cut costs on operation, maintenance and repairs because FRAM keeps oil and engines *clean*. Result? Power-robbing sludge and contaminants are trapped out . . . you get thousands of extra engine miles between overhauls! That means longer service at less cost per mile! Prove it yourself—get FRAM Cartridges for your engines today!

And don't forget! Corrosive sludge and acid-forming blow-by gases cost you fleet profits, too. Stop these engine-killers with FRAM Positive Crankcase Ventilators. A

FRAM Positive Crankcase Ventilator circulates clean, fresh air through the crankcase at all speeds, pays for itself in longer engine life!

**KEEP YOUR FLEET OUT OF THE SHOP
AND ON THE ROAD—WITH FRAM!**

FRAM
OIL • AIR • FUEL • WATER
FILTERS

FRAM CORPORATION,
Providence 16, R. I.
Fram Canada Ltd.,
Stratford, O.

Training-Incentive Plan

Continued from Page 148

heavy equipment. Here horrible accidents were simulated—but those men left the room saying, "None of that for me." Another safety film reached an effective conclusion in a round about way. We showed how artificial limbs are made. Needless to say the point was gotten across while not

a word of preaching was necessary.

Safety conferences held periodically utilize well known speakers from industry who serve as inspiration to the men as well as provide valuable information on safe practices. But subjects are not arbitrarily assigned. We circulate suggestions to each man and ask him to select the subject he wants to hear about at these meetings. Thus he has become a part of the

planning and takes a more active part in the program. This sort of method, we know, puts teeth into the safety meetings that might otherwise become rote.

Incentive Plans

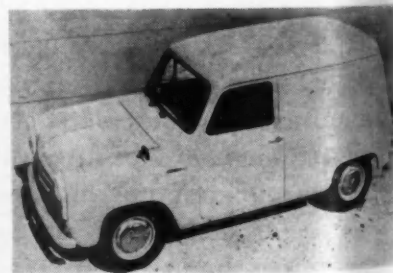
Incentive plans for mechanics are not often found in bus fleets, but we have worked out a system that has improved morale and has resulted in scores of ideas and tools that save time in maintenance. The incentive is built around suggestions for shop tools or short cuts from the men themselves. We cultivate their ideas by providing either (1) a day off or (2) equal pay for ideas selected and used in the shop. They can take this time off during Christmas holidays, for extra vacations or at any time they designate. Or they can trade it for the additional wage—if their ideas are selected for development.

Now, to make it fair, we select a committee from the mechanics themselves to decide whether the tip is worth using in terms of time savings, safety, or ease of work. They have the final say. Seldom have I had to sit in on this committee. In fact the committee is tougher on their own men than I would be. And an idea really has to show merit if it is accepted.

Shop-Made Tools

We have as many as one idea per month turned in by the body
(TURN TO PAGE 152, PLEASE)

1/4-Ton English Ford



Newest line of English-built Ford products to be introduced in the United States is the 1/4-ton Thames van. Powered by a 36 hp four-cylinder engine, the Thames Van has a wheelbase of 87 in., features a new "all steel body" with a useful capacity of 66½ cu ft and a gross laden weight of 2240 lb. It delivers in New York City for about \$1300.00.

COMMERCIAL CAR JOURNAL, June, 1955

EXACT PRINTED RECORDS mean low cost inventory and cost control



BENNETT

Model 789 Fleetmeter automatically keeps gas records

Built around the famed Bennett pump with its low maintenance cost and simple, trouble-free design, the Bennett Fleetmeter is the most economical method of handling fuel not intended for resale. Fleet garages, boat docks, bus terminals, farms... everywhere inventory control and unit operating cost systems are wanted...there's a spot for a Bennett Fleetmeter.

Ask your John Wood representative about the two basic models—Model 789 that *automatically* prints a receipt, keeps a running record of total gallons dispensed and eliminates errors, and Model 788 with high visibility index and concealed totalizer.

JOHN WOOD COMPANY

Bennett Pump Division
Muskegon, Michigan



Eaton
Eatonite
wear re
Eaton-d
valve l
sodium

EATON
PRODI
Engine Parts •
Springites • Sp
COMMERCIAL CA

Eaton Increases Valve Life

5 ways

Eatonite-Faced Valves

Eatonite — heat resistant, corrosion resistant, wear resistant—applied to valves by a special Eaton-developed process, adds materially to valve life. Available on solid valves, hollow sodium-cooled valves, or free-valves.



Eaton Hydraulic Valve Lifters

Eaton Zero-Lash Hydraulic Valve Lifters maintain zero valve clearance under all operating conditions; improve valve seating; prevent valves pounding into seats. Available in all types and materials.



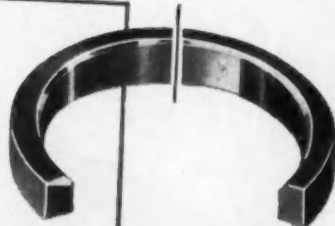
Eaton Free-Valves

Freedom to turn in either direction prevents formation of stem and seat deposits; no sticking or scuffing; no burning or guttering. Eaton Free-Valves can be applied to engines of all types without costly design changes.



Eatonite Valve Seat Inserts

Valve seat inserts of Eatonite—heat resistant, corrosion resistant, wear resistant—reduce valve failure caused by prolonged operation at excessive temperatures and maintain a high level of engine output. Available for all types of engines.




Eaton Sodium-Cooled Valves

Eaton Sodium-Cooled Valves run cooler, last longer, maintain a high level of engine output and economy. They ordinarily require no attention between engine overhauls; keep trucks on the job; pay for themselves many times over.



EATON

—VALVE AND SAGINAW DIVISIONS—
MANUFACTURING COMPANY
 9771 FRENCH ROAD • DETROIT 13, MICHIGAN
 General Offices: CLEVELAND, OHIO

 **PRODUCTS:** Sodium Cooled, Poppet, and Free Valves • Tappets • Hydraulic Valve Lifters • Valve Seat Inserts • Jet Engine Parts • Rotor Pumps • Motor Truck Axles • Permanent Mold Gray Iron Castings • Heater Defroster Units • Snap Rings • Springtites • Spring Washers • Cold Drawn Steel • Stampings • Leaf and Coil Springs • Dynamatic Drives, Brakes, Dynamometers

COMMERCIAL CAR JOURNAL, June, 1955

Training-Incentive Plan

Continued from Page 150

shop, the inspection shop or the general overhaul men. Approximately 20 per cent are turned down as impractical but the others have proven out in service. Examples of selected shop tools are:

1. A battery cart that eliminates manual lifting altogether.
2. A whole series of paint

guards that fit into windows, lights and around doors so that masking is not required.

3. A traveling carrier which transports the paint spray equipment around the bus, making it unnecessary to get down from the scaffold when painting.
4. A transmission jack that makes it possible to lower the unit from the bus while on the lift without danger.

5. A flusher for the V-drive which has raised mileage of this component as much as 30 per cent.
6. A power operated door for the hot dip tank which eliminates burned hands when mechanics are in a hurry.
7. A system of operating the bus washer so that it is entirely automatic.
8. Parts tables, dipping baskets, stands and hoists of all descriptions.
9. An array of special tools and gadgets that make specific jobs easier and faster and safer.
10. A whole series of improved procedures for removing engines, cleaning parts, inspecting and testing equipment.

This list is far from complete but will serve to show to what extent we will go to get our men interested in coming up with better ways to do their jobs. (More details on some of these items will be described in another issue of CCJ.)

Another phase of the incentive system comes in the form of our Gold Button Banquets. We take the entire mechanical department to a first class hotel for dinner and the awarding of recognition for service. Here they receive gold service buttons and special recognition for any meritorious work. Entertainment and cocktails are a standard part of the banquet. Our ninth annual banquet was held only recently, when we honored 13 men for their 30 year service with the company; 23 men received buttons for 25 years of service. That in itself speaks well for our human relations program.

Rating of Mechanics

How effective is our human relations program? We can measure it. We know that it has raised the standards and the daily output as well as improved the attitudes of our men. We have prepared a personnel rating for mechanics and can measure their progress, but we can also help them to improve by showing them the results of the study.

(TURN TO PAGE 157, PLEASE)

COMMERCIAL CAR JOURNAL, June, 1955

Training-

We list r
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Below 6
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COMMERCIAL CAR

KELITE

ADVANCED CHEMICALS AND EQUIPMENT
for cleaning and processing in Business, Industry, and Agriculture

CLEANING AND PROCESSING COMPOUNDS

KELITE
PH Control THROUGH pH CONTROL

KELITE
STEAM CLEANER

KELITE patented products with exclusive features bring new efficiency to business and industry. That's why the green and yellow KELITE drum is now a familiar sight all over America. For free illustrated Bulletin 136 which describes the remarkable KELITE High Volume Steam Cleaner... or a KELITE Service Engineer to consult on any cleaning problem, large or small... phone your local KELITE office or write KELITE, 1250 N. Main Street, Los Angeles 12, California.

Division Offices in
Los Angeles, Berkeley Heights, N.J., Chicago, Dallas, Mexico City, Toronto

Service Offices in 98 Principal American Cities and 16 Countries Abroad

Training-Incentive Plan

Continued from Page 152

We list ratings showing name, position, age, seniority, accident rating, and merit rating. The merit rating is based upon the following points system:

Below 60—unsatisfactory

60 to 70—poor

70 to 80—fair

80 to 90—good

Above 90—exceptional

The following valuations or headings are considered in rating each man:

Orderliness

Energy

Initiative

Cooperativeness

Skill

The rating chart will show what we mean by this breakdown.

RATING OF PERSONNEL

ORDERLINESS: Good house-keeping at bench or place where work is done—economy in use of materials and tools—ability to produce as much as possible by personal planning of own work. Are you a periodic cleaner?

ENERGY: Ability to keep on the move within reason—with a minimum of waiting, loafing or wasting time. Are you tired from 2 o'clock on?

INITIATIVE: Ability to think for yourself with a minimum of supervision and help. An abundance of "know how" in the class to which you are assigned. The desire to step out and learn anything to help do the job quicker and better. Can you see something extra to do?

CO-OPERATIVENESS: Ability to get along with others around you with a minimum of friction. The helping of apprentices and others who know less than you do. Do you have many bad friends?

SKILL: The real "know how" of your job, the ability to adjust to the requirements when they change. Are you "goed" with no punches pulled?

Ratings are made out periodically by the foremen on each man under him. They live with them. The foremen know what they can do and how effective they are in doing it. They know when a man is

loafing and they know when he is doing the job well.

I review these reports and call the men in when work is unsatisfactory. Likewise, when a man is reported as exceptional, I call him in to compliment him on his work. But in the main the reports are used to help those who can improve with time and assistance from the others. I have some pretty damaging facts when a reprimand is necessary. The reports have

been made out by their co-workers. They have been rated by their fellow men, while I am only the arbitrator, coming in to help him overcome certain deficiencies. And in this position I have been instrumental in salvaging many a man headed for trouble. Just check over again the Rating of Personnel sheet here and you can see what I mean.

END

Please Resume Reading Page 72

Revolutionary! NEW ATI "Engine Mated" MUFFLERS FIT YOUR ENGINE Not Just the Exhaust Pipe!

Here's the biggest news in truck and bus replacement mufflers ever made! ATI "Engine Mated" Heavy Duty Truck and Bus Replacement Mufflers are custom specified to the cubic inch displacement of each of your truck and bus engines! ATI—and only ATI—heavy gauge, all welded steel mufflers fit your engine, not just the exhaust pipe. Now, for the first time you can get the full performance that was built into your engine . . . quietly. Now, for the first time, you can get proof of all these advantages others claim:



BIGGER PROFITS

because this new idea in mufflers means lower cost per mile, longer life, fewer replacements, less maintenance

MAXIMUM QUIET

because ATI "Engine Mated" mufflers are designed to equal or better AMA and ATA noise standards



MINIMUM BACK PRESSURE

because they meet or exceed engine manufacturers' requirements to give you increased engine performance, greater horsepower AND greater fuel mileage

BETTER FIT

for maximum operating efficiency, greater safety, less danger from CO fumes . . . for ease of installation.



You benefit . . . your drivers benefit . . . the public benefits when you use ATI "Engine Mated" Mufflers AS OPERATORS EVERYWHERE ARE DOING. Get proof from your supplier today. (If he does not have information on the ATI line as yet, write, wire or call us direct. We'll get details to you at once.) Write Dept. CCJ.



Some territories still open for representatives and distributors. Write for details.

ALEXANDER-TAGG INDUSTRIES, INC. • Hatboro, Pa. • OSborne 5-7200
manufacturers of replacement mufflers, dual wheel dollies

Two-Day College Refresher Course

Continued from Page 83

Classify your accidents, determine their total costs, including "hidden" costs. Point out the cost of accidents to drivers, show how they can reduce them, enlist drivers' cooperation. Establish a driver incentive program. (There were mixed opin-

ions as to whether cash or other incentives should be used.) Establish either a prize for high-standing groups or a "booby prize" for low ranking groups of drivers. Use patrol cars (there were mixed opinions as to whether these should be



use only
**FACTORY NEW
GENUINE
BENDIX DRIVES
and
PARTS!**



Repeat business is the foundation on which service profits are built. One of the surest ways to keep customers coming back time and time again is to use only genuine parts in your repair work. When you service Bendix* Drives, be sure to use only *factory new* Bendix Drives and Parts. Your customers will get the same dependable performance built into every original Bendix Drive—performance proven by over 100,000,000 installations. Insist on *factory new* Bendix Drives and Parts when you order from your distributor. *REG. U.S. PAT. OFF.

Bendix Drive

ECLIPSE MACHINE DIVISION of
ELMIRA, NEW YORK
Export Sales: Bendix International Division, 285 East 42nd St., New York 17, New York

Bendix
AVIATION CORPORATION

marked or unmarked). Set up a system for retraining accident-repeaters.

2. How does a fleet superintendent convince a fleet management that is enjoying relatively low operating costs with its present system that it should have a formal preventive-maintenance program?

Solution: Compare the fleet's costs with those of similar fleets which have formal PM programs. Establish a test group of vehicles and give them a formal PM schedule, then compare their performance over a period of time with those vehicles which did not receive scheduled maintenance. Suggest that a formal schedule of present practices be drawn up as a guide to the successor to the present fleet manager. Point out the value of adequately maintained equipment in terms of maintaining delivery schedules, driver morale, and good public relations. Point out that equipment that has had scheduled maintenance has a higher trade-in value than other equipment.

3. How do you overcome a negligent attitude on the part of drivers?

Solution: Examine selection and training program so that negligent drivers are weeded out or retrained. Establish an incentive program. Coordinate your driver-safety program with a good maintenance program. Use tachographs and assure that supervision is adequate. Discuss the problem with individual drivers. Establish a board of review to review driver practices. Set up a company rule book and make sure that drivers understand it. Make sure that drivers are in good physical condition, with periodic re-examinations.

4. What can be done to overcome the problem of drivers taking extra time at lunch and coffee breaks?

Solution: Install tachographs and discipline drivers. Use a road patrol. Install mobile communication equipment in trucks and contact drivers at end of their breaks. Review driver-supervision activities.

Personal Communications

In recognition of the importance to fleet supervisors of effectiveness in talking or writing to others, the course included a session under the direction of Dr. Harold J. O'Brien, (TURN TO PAGE 160, PLEASE)



Special Metro-type dump body illustrated.

St. Paul
HYDRAULIC

... oldest name
in hydraulic
hoists ...

Still the best buy in cost-saving features

One look will convince you that the new 1955 St. Paul Hydraulic hoists are as far ahead of other "dumping devices" as the original St. Paul units of 42 years ago.

For one thing, St. Paul's exclusive Uni-flex subframe, with two tension links per cylinder, provides greatly increased strength and flexibility, with up to 300 lbs. less dead-weight per unit. Equi-lift strut arms, with rigid torque tube assembly, eliminates the old trouble of arms binding and buckling — even in hillside dumping. You also get faster dumps, without over-travel damage — thanks to better lifting leverages, and improved piston stop.

Inexpensive replaceable bushings at critical load points . . . a longer lasting hydraulic system that can be repaired in the field with ordinary tools . . . are two more reasons why the new St. Paul work-rated hoists can be counted on to deliver maximum payloads, day in and day out, with minimum down-time and greatly reduced maintenance expense for both hoist and truck.

See your St. Paul Distributor or write us for latest facts and figures on the complete St. Paul line, including Standard Duty hoists from 6 to 10-ton capacity with matching dump bodies . . . also conversion hoists for platform type bodies, end gates, refuse units.

10 Heavy-Duty Hoists for every size body

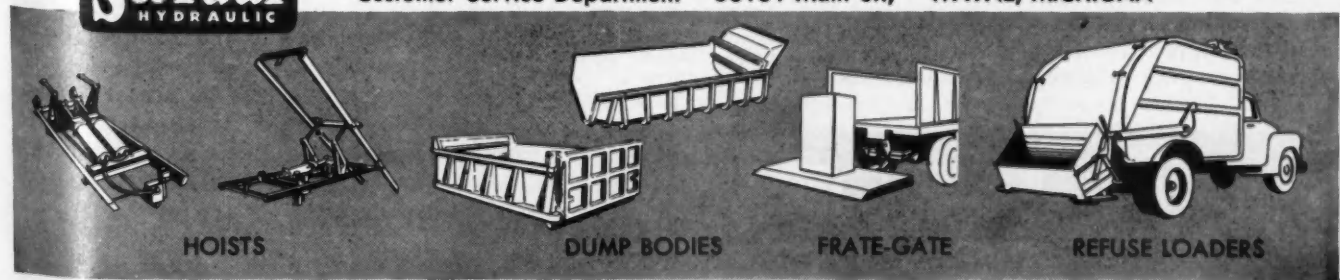
<p>9' to 12' body</p> <p>9 to 12½-ton cap.</p>	<p>10' to 13' body</p> <p>9 to 12-ton cap.</p>
<p>10' to 14' body</p> <p>12 to 17½-ton cap.</p>	<p>10' to 14' body</p> <p>15 to 22½-ton cap.</p>
<p>10' to 14' body</p> <p>18 to 27½-ton cap.</p>	<p>10'6" to 17' body</p> <p>8 to 30-ton cap.</p>

Ask for free booklet giving full details on St. Paul Heavy-Duty Hoists and dump bodies.

S-HC-5r

St. Paul
HYDRAULIC

ST. PAUL HYDRAULIC HOIST
Division of Gar Wood Industries, Inc.
Customer Service Department 36131 Main St., WAYNE, MICHIGAN



HOISTS

DUMP BODIES

GRATE-GATE

REFUSE LOADERS

Two-Day College Course

Continued from Page 158

Associate Professor, Speech, of the University.

Pointing out that if you want a job to be done right there must be mutual understanding between you and the person doing the job, Dr. O'Brien stressed oral communication because it is most often used,

it is personal, it is immediate and is the best means of communication when it is possible to use it.

What should you do to assure good oral communications?

1. You should size up the situation and the listener, know what you want to say and to whom you are saying it. It is important to choose the right moment at which to give an order or other form of communication. Based on this initial grasp of the situation, you should express your desires in terms

of the other person's interest, appealing to his motivations.

2. You should decide on a specific goal for that particular communication. Ideas must be organized so that remarks may be pin-pointed to achieve the goal.

3. When you want to convey information, there are three steps to be followed:

(a) Obtain attention, making sure that the listener or listeners are in the proper frame of mind to receive your comments. Then give an initial summary of the material you intend to cover.

(b) Treat the points covered in the initial summary, developing them as necessary.

(c) Review and summarize the material you have covered.

4. When you want to persuade a listener to take action there are direct and indirect approaches. The direct approach is a simple statement of what you want done. In the indirect approach, there are two frequently used methods:

(a) You set up a series of minor questions to which your listener is virtually sure to answer "yes," following these with the major question to which you want a "yes."

(b) You offer a series of not-quite-adequate alternatives leading up to the alternative that you wish to be accepted. By eliminating the inadequate procedures, your listener is left with your wish as the logical one to be followed.

While written communications have a degree of permanence lacking from oral comments, they usually are more formal, less personal. To be effective, they should be well-organized, simple, short (in sentence, paragraph-length and total length), concrete, with specific examples when possible, should avoid generalization, and should use colorful, alive and varied language.

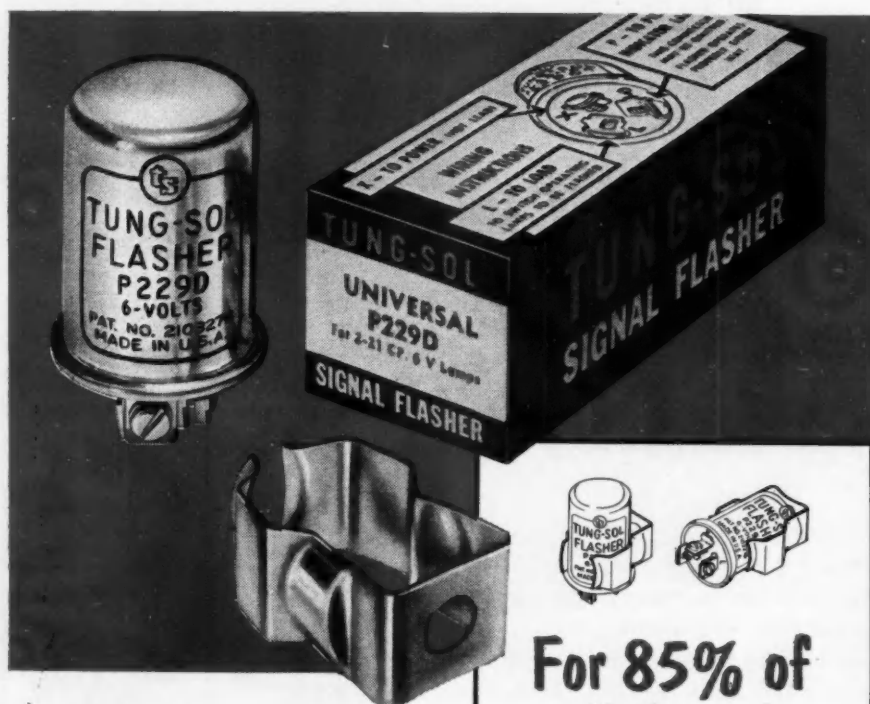
Varied Courses

The refresher course is only one of many conducted under the program of the National Advisory Committee for Motor Fleet Supervisor Training at colleges and universities across the country. A special report on this program describing courses available will appear in a future issue of COMMERCIAL CAR JOURNAL.

END

Please Resume Reading Page 84

COMMERCIAL CAR JOURNAL, June, 1955



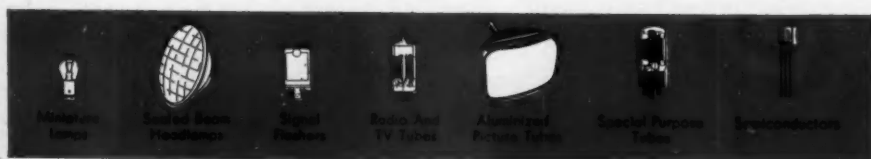
TUNG-SOL® UNIVERSAL SIGNAL FLASHERS

Just about nine out of every ten service jobs that necessitate replacement of the signal flasher can be handled with this one Tung-Sol Universal Flasher. The special mounting bracket takes the place of ten screw-terminal and attached-bracket types of mounts—seven in passenger cars and trucks with 6 volt circuits and three in 12 volt trucks and busses. In addition, both the 6 and the 12 volt Universal Flasher can be stripped down to replace the respective plug-in types. Universal

For 85% of
all Signal
Flasher
Replacements

Flashers P229D (6 volt) and P241D (12 volt) are supplied with mounting brackets and special wiring connector screws and nuts. Order from your regular supplier.

TUNG-SOL ELECTRIC INC.
Newark 4, N. J.
Sales Offices: Atlanta, Chicago, Culver City (Los Angeles), Dallas, Denver, Detroit, Montreal (Canada), Newark, Philadelphia, Seattle.



1

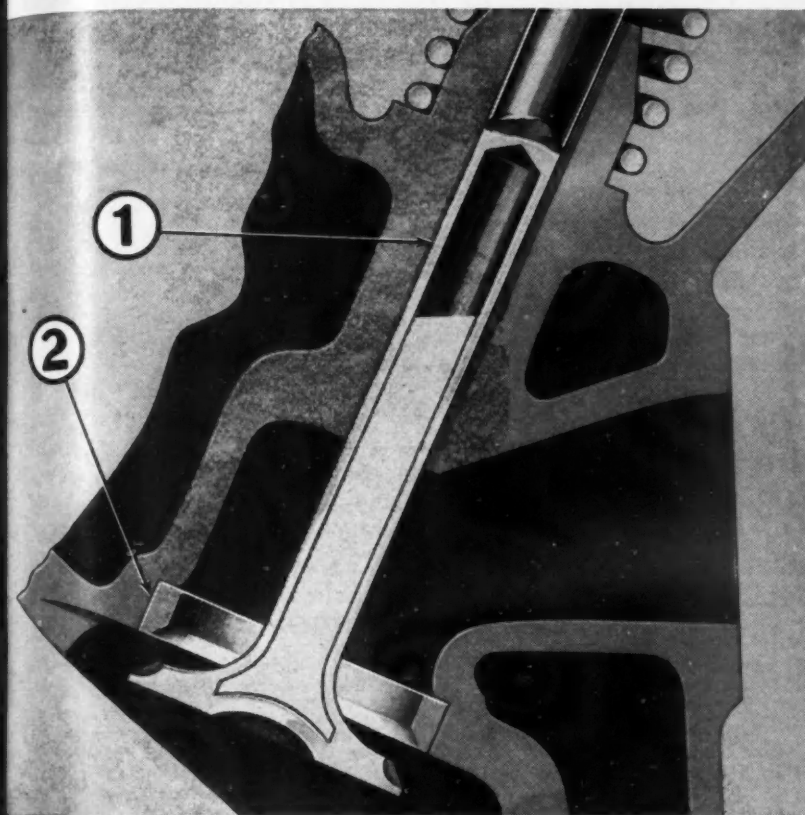
2

No other combination found in Other making degree them in the

All these many more laboratory goal in r Cargo Kin your fleet time before

FORD

COMMERCIAL C



1. The sodium-cooled exhaust valve stem is larger than a *solid* stem; is more resistant to distortion. By providing more surface area, the larger diameter permits better heat transfer to the coolant.

2. Solid cobalt-chrome seat insert is both corrosion- and wear-resistant. Longer valve life also results from valve rotation—which prevents “hot spots” and consequent burning.



FORD'S T-800 BIG JOB with improved 170-h.p. *Cargo King* V-8, designed to give extra-long mileage without a major overhaul. GVW: 42,000 lbs. Power Steering standard. Optional 11,000-lb. front axle for greater front-end capacity. Auxiliary transmissions available.

No other truck engines today have the complete combination of long-lived valve train components found in today's modern Ford Truck engines. Other make engines have some of these in varying degrees—but only Ford gives you ALL of them in the mighty *Cargo King* V-8 line.

All these new improvements are the result of many months of extensive research and field and laboratory tests. The Ford engineers had one goal in mind—to provide extremely durable *Cargo King* engines that would enable you to keep your fleet rolling for a much longer period of time before major servicing is required. The end

result, of course, is increased operating profits for you. Your Ford Dealer will be glad to furnish you with more details. See him before you buy your next truck, won't you?

LOOK UNDER THE HOOD!

When you buy your next truck, look for an engine with a “stroke” as short as, or shorter than its “bore.” That's a modern *short-stroke* engine—the kind that only FORD gives you in *all* models for reduced piston travel and piston speeds . . . up to 33% less friction, more usable power . . . gas savings up to 1 gallon in 7 . . . less wear on vital moving parts and much longer engine life.

FORD TRIPLE ECONOMY TRUCKS

THE MONEY MAKERS FOR '55

More Cube... Carriers' Battle Cry

Continued from Page 69

all within the 45-ft length. Again the king-pin is mounted well forward of the tandem and again power is applied to the first two axles.

For the 60-ft overall length problem, FWD suggests the possibility (and it is admittedly only

in the dream stage) of a 52-ft trailer and the short-coupled cab. Maneuverability appears to be the only drawback to this otherwise sound proposition.

High Volume Van

Along with progress in shorten-

ing the tractors and increasing the length of trailers have come parallel developments in the evolution of the high volume van now familiar in all parts of the country. With the old-type trailer, an operator was lucky if he could squeeze out 1800 cu ft from even a 35-ft van. Roofs were already pushed to maximum legal height so the trick was to lower the floor and decrease wall thickness.

Lowering of the floors is usually accomplished by a drop in floor height just aft of the tractor wheels, and by redesigning the trailer suspension unit to accommodate the lower floor without further interference. Two steps are now commonplace. One is adaption of smaller outside diameter tires—usually of 10.3 in. cross section. The other is use of a constant level suspension unit which requires much less clearance space. The most spectacular of these is the General self-leveling air cushion now incorporated in several suspension makes.

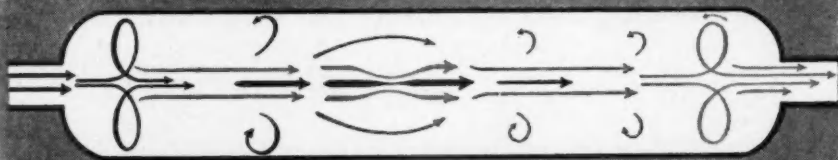
At the same time wall thicknesses have been squeezed thinner and thinner. Most of the newer types use a smooth inside with extrusions on the outside. This eliminates need for a liner. But at least one manufacturer has an integrally designed side panel, smooth on both sides, that is only one inch thick. The combined result of these developments is that possible cube for a 35-ft trailer is now close to 2300 ft.

Just what this means to a carrier can be illustrated by this example. For years an eastern operator has been hauling empty bottles to a manufacturing firm. With a regular 30-ft trailer, he averaged 13,000 to 19,000 bottles per load, depending on size. With his new 35-ft high volume van, he handles anywhere from 20,685 to 29,217. Since he is dealing in trailer load shipments he has been able to materially reduce transportation cost for the shipper as well as to increase his own profit margin.

Weight Distribution

With all of these developments it obviously becomes easier to (TURN TO PAGE 166, PLEASE)

There's NO EQUAL



FOR TRUCK, BUS OR DIESEL

**ANOTHER BASIC DESIGN IMPROVEMENT TO
REDUCE NOISE, INCREASE HORSEPOWER,
INCREASE FUEL MILEAGE, REDUCE BACK
PRESSURE and IMPROVE ENGINE EFFICIENCY**

The RIKER Heavy Duty Muffler represents another engineering accomplishment in basic muffler design that is unequalled in performance. This highly efficient unit *reduces replacement cost* by adding high-speed mileage and longer, more-satisfactory operating life. Only the best is good enough for highway and street operation, today! Install RIKER!

Heavy Duty Mufflers and Exhaust System Accessories is a BUSINESS with RIKER... not a sideline.

Also, Complete Line

**RIKER
EXHAUST SYSTEM ACCESSORIES**

...

UNIVERSAL TAIL PIPE
TAIL PIPE REDUCERS
SHORT TAIL PIPES
CURVED STACK PIPES
FLEXIBLE STACK CONNECTORS
HEAVY DUTY MUFFLER HANGERS
HEAVY DUTY PIPE HANGERS
HEAVY DUTY "U" CLAMPS
90 DEGREE ELBOWS
COUPLERS
HEAVY DUTY FLEXIBLE TUBING

Ask Your Jobber or Write

RIKER

**DESIGNERS & MANUFACTURERS
HEAVY DUTY
MUFFLERS
Exclusively**

RIKER MANUFACTURING—4809 DETROIT AVENUE—TOLEDO 12, OHIO

★ ONE OF THE 1955 PARADE OF NEW "OK" PRODUCTS ★



Just... **SHAKE IT**
NO HARD SETTLING!

LOAD IT ON
DRIES THROUGH FAST!



SAND IT
WON'T GUM PAPER!



NEW OPEX® "SPEED-FILL" PRIMER-SURFACER

- ★ **FASTER TO USE**—won't settle hard, even overnight!
- ★ **FASTER SANDING**—wet or dry—without gumming
- ★ **MORE BUILD** with less thinner

Ask about all these 5 new star performers!

- ★ NEW OPEX "SPEED-FILL" PRIMER-SURFACER
- ★ NEW KEM® RED OXIDE PRIMER
- ★ NEW KEM "FLO-GLO" REDUCER
- ★ NEW OPEX "POTENT" LACQUER THINNER
- ★ NEW OPEX "SPOT-SOLV" LACQUER REMOVER *Trade-Mark

saves time three ways!

No more time lost getting hard-settled primer-surfacer ready to spray! New OpeX "SPEED-FILL" *stays* soft—is ready to go in the morning with just a few shakes of the gun.

Saves time, too, two other ways. Quick flash-off gives you extremely fast drying, even when it's loaded on, fast and heavy. And it sands faster, too, either wet or dry, without gumming. "SPEED-FILL" Surfacer gives you fast-filling quality with a *minimum* of shrinkage and better protection against blistering under abnormal weather conditions.

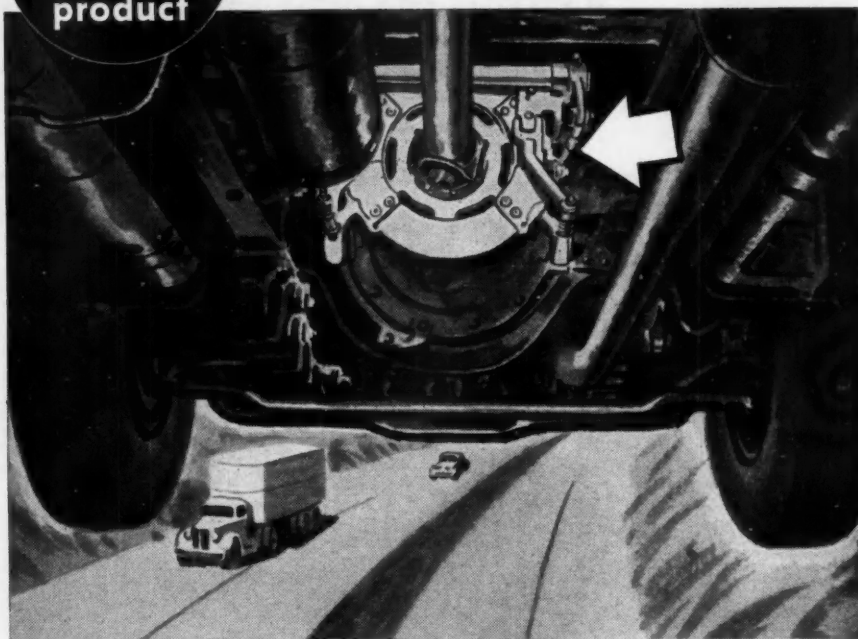
Join the parade that's cashing in on this important new product in the Sherwin-Williams 1955 "OK Parade of Products"! Call your OK Jobber—try it today! The Sherwin-Williams Co., Automotive Division, Cleveland 1, Ohio.

SHERWIN-WILLIAMS
AUTOMOTIVE FINISHES



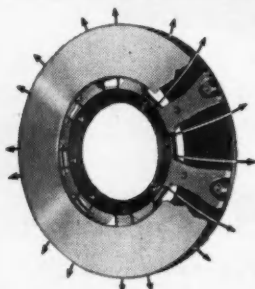
an
ACCO
product

Specify Tru-Stop Emergency Brakes



Insure Safe Stops!

• Leading manufacturers of trucks, buses, tractors and special equipment offer TRU-STOP Disc-Type Emergency Brakes, either as standard or optional equipment. Wise buyers insist on factory installation of TRU-STOPS to get all these braking extras:



Longer Lining Life

• The terrific heat generated in braking cuts lining life. TRU-STOPS quickly dissipate this heat. Most of the disc is exposed to the air even during braking. And a cooling jet of air circulates through the disc, prolongs lining life.

For full details on
TRU-STOP
write for booklet

Real Emergency Brakes. TRU-STOPS are real emergency brakes—they serve as auxiliary brakes, assisting service brakes on downgrades if required.

They will stop the vehicle too.

Smooth, Positive Stops. TRU-STOPS prevent accidents by insuring quick, positive stops in emergency situations.

Positive Parking Brakes. TRU-STOPS hold safely on steep grades—prevent "parking brake" accidents.

Lower Service Requirements. TRU-STOPS seldom need service. Mounted directly on the drive shaft, their simplicity of design and accessibility greatly reduce maintenance requirements. Relining or adjustment is a simple job for any mechanic with ordinary tools. It is not necessary to drop the drive shaft.

Specify TRU-STOPS for factory installation on your next vehicle.

ACCO



**Automotive and Aircraft Division
AMERICAN CHAIN & CABLE**

601 Stephenson Bldg., Detroit 2
2216 South Garfield Ave., Los Angeles 22 • Bridgeport 2, Conn.

**TRU-STOP
Emergency
Brakes**

More Cube...Carriers' Cry

Continued from Page 164

reach total maximum loads and still easier to exceed them on any one axle or axle group. Hence a corollary problem of greater cube is the necessity for greater care in load distribution.

The tandem trailer axle is now generally accepted as standard for normal operation of vans in the high volume 35-ft length category. While three-axle tractors are generally accepted in the west, the two-axle job is still king in the east. With a loading of 5000 lb on the front axle, 18,000 lb on driving axle and 36,000 lb on trailer tandem, you can get 59,000 lb even under the ASSHO code. But it has to be exact.

The sliding tandem provides one solution for part of the load can be switched from driving axle to tandem merely by sliding the tandem forward, or vice versa. And it has the extra advantage of immediately redistributing the load when the unit is interlined from a two axle tractor to a three axle job.

Another solution is the use of a third axle on the tractor (either trailing or pusher) just as insurance against axle group overloads even though total gross may not be increased. Many large carriers are doing just this and the subject was discussed thoroughly in the January, 1954, issue of CCJ.

Weight and Horsepower

Increased load capacity and the resulting likelihood of increased total weight (to legal maximums) also calls for reappraisal of unloaded weights and usable horsepower. For a while there appeared to be a lull in efforts toward further weight reduction. "The pound of weight saved is a pound of payload gained" theme didn't apply when it was not possible to obtain maximum loads. But with the high cube jobs it's back in full bloom and every manufacturer is striving for lower tare weights to boost the profit margin. We can look for

(TURN TO PAGE 168, PLEASE)

Kroger
Trailm
made

Ability to carry
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LEASE)

June, 1955



Checking in more
payload per trailer . . .

means TONS more
merchandise moved
per hour



Kroger profits with Trailmobile CID reefers made of Alcoa® Aluminum

Ability to carry a thousand pounds more in each trailer adds up tremendously for an organization like Kroger, which hauls 85 million pounds of food-store products every week. A Kroger warehouse may have to move 1,000,000 lbs within a 24-hour period to keep stores stocked with fast-moving items. That's why Kroger operates 1,300 all-aluminum trailers to accelerate their vital distribution system.

Aluminum provides much more payload, both in weight and cubage, by reducing weight of truck and trailer. And operating and maintenance costs are cut, too—no small matter when Kroger trailers travel 34 million miles a year.

The Trailmobile CID reefer, shown here, is one of 100 recently ordered by Kroger. CID means Customer Individualized Design . . . a plan which lets the trailer buyer actually design the units for his particular needs.

Trailmobile and Alcoa Aluminum serve Kroger and provide another example of how aluminum turns costly weight into paying freight. Find out what your actual profit will be when using aluminum equipment. Write for the new Weight-Rate-Profit Chart to figure that extra profit. Address: Aluminum Company of America, 1876-F Alcoa Bldg., Mellon Square, Pittsburgh 19, Pennsylvania.



Your Guide to
Aluminum Value



COMMERCIAL CAR JOURNAL, June, 1955

167



Vista-Liner by Flxible

Flxible Co., Loudonville, Ohio, is now delivering the first of these new two level 37-passenger buses against the recent purchase by Trailways Bus System of 100 units. The new coaches, known as "Vista-Liner 100s," will go into service on Trailways main routes, such as Dallas to Chicago, Mobile to New York, etc. Features are air-conditioning, new type reclining seats and individual loud speakers for recorded music. Mechanical innovations include torsilastic springs and independent front wheel suspension.

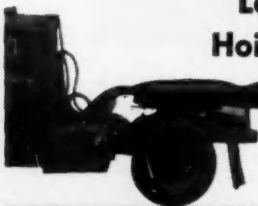
For Bridge Formula States . . .

**BIGGER PAYLOADS
A PROFITABLE
FACT** *with*

PENN'S

new

**Long Front-Mounted
Hoist and longer body**



Penn does it again—this time it's a new long front mounted hoist which permits a 50° dumping angle of any length body up to and including those 25 feet in length. This installation provides a distinct weight advantage when you are operating in those states where the bridge formula applies—for example, New York State 65,000 lbs. gross—Ohio, 70,000 lbs. gross.

For all its extra payload length, this latest Penn development is 95% safer than other types of hoist installations. Dangerous body overhang is eliminated since the load is lifted from the front. The front mount feature places more weight on the tractor axle and less on the trailer chassis axle.

Boost Payload Safely with Penn!

Your inquiries are welcome

**Truck Body Specialists with 22 years
experience in the use of telescopic hoists**

PENN BODY DIVISION

**HOCKENSMITH
CORPORATION**

PENN, PA. Call: Jeannette, Pa., Lafayette 3-5401 . . . Pittsburgh, Electric 1-1242

More Cube...Carriers' Cry

Continued from Page 166

still further developments in the use of aluminum and lighter alloy steels in virtually every part of the vehicle.

Horsepower is equally important. Operators who were using the lightest possible tractors to save on unloaded weight found themselves bogged down on the hills. Hence there appears to be a definite trend to more power and bigger engines. As one positive clue, factory sales for domestic use of all trucks dropped off slightly more than 200,000 units in 1954 over 1953. But according to AMA estimates the diesels dropped only 336 (10,546 in 1954 against 10,872 in 1953).

Traction Problems

Another corollary is the matter of traction. With total gross of 60,000 lb in the east and not too many mountainous areas, one driving axle is usually considered satisfactory. Not so in the west where the heavier loads and steeper grades have made tandem drive virtually standard procedure. This is an easy job with the truck-full trailer rigs and with the big tractor-trailers, but when you try it with double bottoms and COE's, you run fresh out of space.

Because of its inherent flexibility (all the load in trailers) the double bottom has long been a west coast favorite, but when you start up a mountain grade with one driving axle you're in trouble.

(TURN TO PAGE 170, PLEASE)



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Page 166

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t flexibil- lers) the y been a when you ade with a trouble. (PLEASE)

June, 1955



FLEET SERVICE

is more profitable with **Schrader** TIRE SERVICE



A. SCHRADER'S SON

Division of Scovill Manufacturing Company, Incorporated
470 Vanderbilt Avenue, Brooklyn 38, N. Y.

Schrader
REG. U. S. PAT. OFF.

DOWNTIME COSTS MONEY. Catch flats in your service shop where they don't cost as much as when the load's down on the highway. Gauge and record air pressure of all tires regularly. Most flats give a slow-leak warning signal that can *only* be found by accurate gauge readings. A comparison of readings will point out slow leaks.

Certify the accuracy of your gauging-inflating equipment with a Schrader 8106B Trutest Special Gauge. For all your tire inspection work use the Schrader 7188BH All-Purpose Service Gauge. When tire maintenance calls for tube repair and valve replacement jobs, do 'em fast and sure with a Schrader Electric Vulcanizer. And always use genuine Schrader Tire Valves. Order them from your supplier today.



FIRST NAME IN TIRE VALVES

FOR ORIGINAL EQUIPMENT AND REPLACEMENT

6804

More Cube...Carriers' Cry

Continued from Page 168

That's why Freightliner has just gone to four-wheel-drive on its new "Spacemaker" COE.

Comparing this rig with comparable loads on tandem drive

equipment, Consolidated Freightway's Jack Snead reports: "It will go further than the others without chains, and with chains it will go where the others won't go at all." This, of course, is a theme that standard four wheel drive manufacturers have been preaching for years.

King Pins and Landing Gears

Closely related is the problem of king pin location. Many highly

technical papers have been written on this complex subject and it is obvious that a complete discussion is impossible here. Suffice it to say that the further forward the king pin location, the greater the load on the front axle. This is often desirable since most front axles are underloaded. But it also creates three other problems: (1) landing gear location, (2) steering ease, and (3) traction.

Generally speaking, the further forward the king pin is located on the tractor, the further back the landing gear must be on the trailer. Result: a nose heavy condition while loading, which must be carefully studied. Before us at the moment is a new chart on this subject from White Motor Company which would be a worthwhile addition for any fleet engineer's file.

With heavily loaded front axles, power steering becomes a virtual necessity and power on the front axle can do much to improve traction. These could well be the next forward steps along with the possibility of the dual front axle as used by PIE (see above) and already in use on some specialized eastern rigs.

END

Please Resume Reading Page 70

K-D Tools ★ Greatest Help on Earth

NEW Door Handle Remover
for all 1955 Chrysler-Built cars!

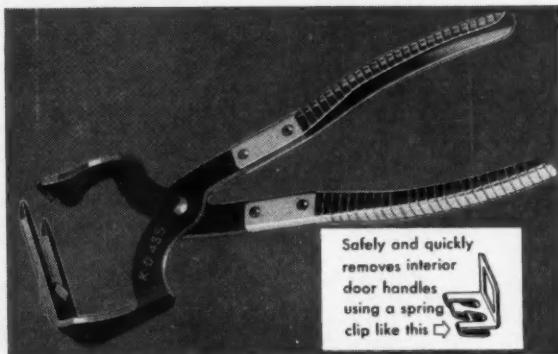
SEE the Swivel Jaw Hose Clamp Pliers!

OVER 100 K-D HUSTLERS FOR YOUR TOOLBOX. WRITE TODAY FOR FREE CATALOG!

Presenting



K-D 435
Door Handle Tool
for
all Chrysler,
DeSoto, Dodge,
Plymouth 1955



Safely and quickly
removes interior
door handles
using a spring
clip like this

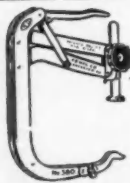


The spring clip holding door handles on these cars must be released from a groove in the shaft before handle can be removed. Tool especially designed to do job quickly, without any possible upholstery damage. Also for removing interior door trim panels. Will work on Chrysler Imperial where others fail. All steel, rustproofed.



K-D 428 HOSE CLAMP PLIERS

Swivel jaws let you reach anywhere in motors to remove, install self tightening hose clamps. Jaws swivel thru 180 degrees. Holds all sizes clamps securely. Best tool for the job you'll find!



K-D 380 VALVE SPRING COMPRESSOR

For L-heads or valve-in-heads, old or new. Most popular valve tool in U.S.A. Fast, safe, dependable.



VALVE GUIDE RETAINERS FOR FORDS. Made per specifications. Cadmium plated. Boxed or bulk. K-D No. 922.

K-D TOOLS
K-D Mfg. Co., Lancaster, Pa.



"Make hard jobs easy" around your shop with K-D Tools. Designed, tested and used by mechanics for over 30 years! At Jobbers.



"I'll account for the 20 minute time discrepancy . . . This rig don't have a bathroom!"

COMMERCIAL CAR JOURNAL, JULY, 1955

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Page 70



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June, 1955

and vehicle there's Blackhawk Jack!

Here's why Blackhawk Jacks
LAST LONGER
and are so
TROUBLE-FREE

Take a look at this "Jack Box Score" and you'll spot many of the reasons why Blackhawk is the big favorite among fleets that keep records on jacks.

These and many other features add up to give you more for your money. Remember — there's a big difference in jacks — and today it costs no more (or even less) to own the best . . . and that's a Blackhawk!

JACK BOX SCORE . . . among the three jack lines most sold to fleets		BLACK-HAWK	LINE X	LINE Z
	MACHINED STEEL PUMP HOUSING — Guarantees longer life because pump cups operate within a smooth micro-finish steel cylinder (NOT in a hole bored in the base casting). Pump-on-side design allows load to center on base.	YES	NO	NO
	MALLEABLE IRON TOP CAP — Greater strength to withstand off-center loading — gives rigidity to entire jack — prevents leakage.	YES	NO	YES
	CROSS-MILLED HEAT-TREATED SADDLE — A safe, sure grip on greasy, icy axles at all times. Teeth stay sharp as a hound's tooth — never wear smooth like ordinary saddles.	YES	NO	NO
	REPLACEABLE PUMP ASSEMBLY — The parts that get the most wear. Complete cost only \$2.06 — can be replaced in the field with ordinary wrench. Screws in like a light bulb. (Pump is not part of a costly base casting.)	YES	NO	NO
	68% INTERCHANGEABILITY OF WORKING PARTS — Applies to all models 1½ to 20 tons. Assures lower maintenance and repair costs — faster service if repairs should become necessary.	YES	NO	NO



Model CB-9
8 TON

Low Hgt. 9"
Hyd. Lift 6½"
Screw Ext. 4½"
Max. Hgt. 19¾"

The leader for heavy trucks, trailers and buses. Most popular tool box jack ever built!



Model D-8.7
12 TON

Low Hgt. 8½"
Hyd. Lift 5½"
Screw Ext. 4½"
Max. Hgt. 18¾"

For emergency road service on extra-heavy buses and trucks. The most widely used shop jack.



Model EA-11
20 TON

Low Hgt. 11"
Hyd. Lift 6½"
Screw Ext. None
Max. Hgt. 17½"

For grueling shop service on trucks, buses and trailers. Standard high lift model also available (lifts to 49½").

New Product Descriptions

Continued from Page 86

for use with the rear power source is a new light-weight post hole digger. This unit is designed for simplified one-man digging and is easily controlled by a built-in hand clutch. The digger is also equipped with a slip clutch for extra operating safety. A feature of the digger is its ability to be angle-operated any place within a

4-by-8-ft area without re-spotting the truck. Holes up to 40 in. in depth and 10 in. in diameter can be quickly bored, either vertically or at a sharp angle.

P26. Hydraulic Tail Gate

Anthony Co., Streator, Ill., announces

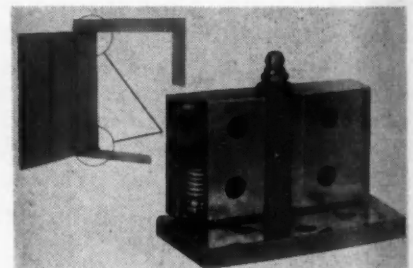
a new Model No. 144 lift gate with 1000 lb lifting capacity. Designed primarily for the $\frac{3}{4}$ and 1-ton stake and van truck field, this lighter weight, lighter capacity hydraulic elevating tail gate also mounts on larger trucks where 1000 lb loads at a time is all that is required. The platform of the Model 144 is manual, spring closed, and comes in either ramp or square, and general purpose styles.

P27. Truck Seat

Bostrom Mfg. Co., Milwaukee, Wis., announces a new truck driver seat that provides a torsional rubber spring suspension system to isolate the driver from most of the ride vibration. Tension on the springs is adjusted to the exact weight of each driver by turning the knob of a calibrated gage. Weight adjustments ranging from 100 to 275 lb are provided. Seat depth, height and angle adjustments, plus four inches of forward and backward movement are included in the "Level Ride 80."

P28. Truck Cabinet Hinge

Betts Machine Co., Warren, Pa., announces a new pressure-lubricated hinge to eliminate sagging, screeching and squeaking of access doors on petroleum tank-trucks and other ve-



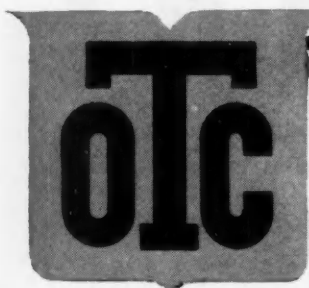
hicles, particularly those that are used for deliveries in residential areas at night. The unit is easily installed by welding or bolting to door and frame. Its threaded pivot bearing harbors grease and eliminates end play. Its spring-loaded ball detent positions door in any one of three positions.

P29. AC Arc Welders

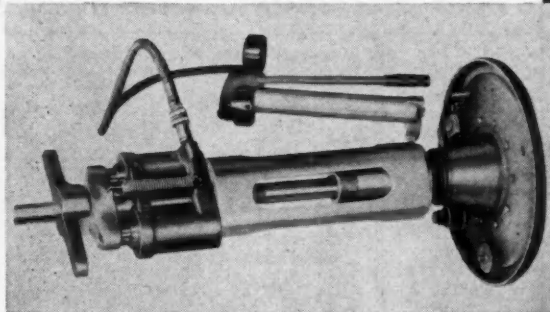
Hobart Bros. Co., Troy, Ohio, has a new line of AC transformer type arc welders. Model Nos. TLP-253-S (with capacitors) and TL-253-S (without capacitors) are dual rated at 250 amp on 30 per cent duty cycle, or 200 amp on 50 per cent duty cycle for operation on single phase, 60-cycle, 230-volts supply line. Both voltage

(TURN TO PAGE 176, PLEASE)

COMMERCIAL CAR JOURNAL, June, 1955



ANNOUNCES HYDRAULIC TRUCK AXLE TUBE PULLER



OTC 50 Ton hydraulic unit removing tube from truck axle housing—set up and pulling takes only a few minutes.

SAVE HOURS
OF LABOR

AND DOWN TIME ON EVERY PULLING JOB

With this new OTC 50 Ton hydraulic puller set, truck axle tubes may be removed (even if broken) and installed in minutes instead of hours. Assembly is simple and positive—tubes are removed without damage—and installed without distortion. Costly *Down Time* is cut by hours.

The OTC 50 Ton hydraulic unit is adaptable to hundreds of similar jobs. With the many OTC pullers and adaptors available it may be used as a portable power unit in shop or field, to push, pull, spread, lift, and straighten.

Shops already equipped with the 50 Ton unit need only to add the appropriate pulling and installing attachments.

SEE YOUR JOBBER OR WRITE US FOR COMPLETE INFORMATION



One man can quickly install a truck axle tube without distortion with a new OTC 50 Ton hydraulic unit.

FREE NEW
HYDRAULIC
PULLING BOOKLET

OWATONNA TOOL COMPANY 341 CEDAR STREET
OWATONNA, MINNESOTA

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Firestone

SUPER TRANSPORTS

Are the Lowest Cost-Per-Mile Tires you can use Today!



Let Your Own Cost Records Prove You Get 80% More Mileage

Give Firestone Super Transport Truck Tires a mileage test on your own fleet. Your own mileage records will prove they can just about double the mileage of regular original equipment highway truck tires. Yet they only cost 12½% more. The Firestone Super Transport's extra thick tread gives 50% more original non-skid mileage, and its thicker tread base can be regrooved to give an additional 30% more mileage . . . a total of 80% more mileage before retreading. And with retreading you get even lower cost-per-mile.

The Firestone Super Transport has a new wider, flatter tread which gives more road contact

and reduces wear. The famous five-rib Firestone Gear-Grip tread design gives full traction without cupping and wiping in any wheel position.

The Super Transport's extra-strong Safety-Tensioned Gum-Dipped* cord body is available in either rayon or nylon. It eliminates tire growth and tread cracking and it insures long retread life. The Super Transport's beads are heavier and stronger than regular tires to match its extra mileage.

Contact your nearest Firestone Dealer or Store for Firestone Truck Tires and Truck Tire Service.

*Trade Mark Reg. U. S. Pat. Off.



Always Specify Firestone for Low Cost-Per-Mile

Enjoy the Voice of Firestone on radio or television every Monday evening over ABC

Copyright 1955, The Firestone Tire & Rubber Co.

COMMERCIAL CAR JOURNAL, June, 1955

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New Products

Continued from Page 174

and amperage are controlled to give the desired control of the arc. The transformer is the "Saturable Leakage Path" type.

P30. Tubeless Tire Valve

A. Schrader's Son Division, Scovill Mfg. Co., Brooklyn, N. Y., announces

its new No. 54 "Eze-Mount" snap-in tubeless tire valve. This new valve is specially designed and shaped for easy insertion into round rim holes. Large hole in the valve base and the tapered, rounded bottom of the metal insert provides a "ball and socket" action to permit flexibility of the valve stem. The new valve incorporates the replaceable valve cap and core.

P31. Truck Reflector

The Grote Mfg. Co., Bellevue, Ky., has just announced a truck reflector

called the "Red Hot." This new reflector features rust-proof and fade-proof construction, and a special exclusive sealing process. It is housed in polyethylene plastic. It has no exposed metal to rust or corrode. Because of the flexible quality of the plastic housing, the reflector can fit snugly against any surface, curved or otherwise. The housing also provides a cushioning effect against breakage.

P32. Clutch Dampener

Lipe-Rollway Corp., Syracuse, N. Y., has introduced a new spring dampener for its line of DP clutches. Equipped with a flexible center, the new dampener not only absorbs torsional vibrations but also cushions the amount of torque shock transmitted to the drive line whenever the clutch is engaged. The new dampener is primarily for use with Lipe-Rollway's DP (direct pressure) clutches for heavy-duty trucks, buses and off-the-highway vehicles. The new dampener currently is available for 10%, 11, 11½ and 13-in. clutches.

P33. Battery Charger

Exide Automotive Division, Electric Storage Battery Co., Philadelphia, announces a new portable, all-



purpose utility battery charger. Weighs only 31 lb. It charges both 6 and 12-volt batteries, and includes a convenient, built-in compartment for storing leads and tools. They are ideal for use on starter service calls and as a supplementary charger. The new model charges 6-volt batteries at 40 amp and 12-volt batteries at 25 amp, operating on 115 volt 50/60 cycle AC.

P34. Polishing Tools

The Black & Decker Mfg. Co., Towson, Md., has introduced two new polishing tools, a heavy-duty automatic polisher, and a heavy-duty polisher plus improved "Vitri-Glaze." Weight has been reduced 5 per cent. New type centrifugal fan increases (TURN TO PAGE 180, PLEASE)

OXWELD
Trade-Mark
RODS



CUT WELDING COSTS

OXWELD rods are precisely engineered both chemically and mechanically to give only top performance in any welding shop. They help you to reduce welding costs because they permit you to:

USE LESS ROD PER WELD—OXWELD rods give high-strength welds with a minimum of reinforcement. Extra strength permits the use of less weld metal.

WELD FASTER—Highest quality ingredients in a rigidly controlled formula make welding with OXWELD rods easy and rapid. You save on gases and labor.

GET LOWER FINISHING COSTS—Welds made with OXWELD rods are uniform in quality, strength, and ductility; also easy to machine.

DECREASE ROD INVENTORIES—You need only five types of OXWELD rods to do all average welding and brazing. For specialized jobs, there are 9 more types . . . all available from one source of supply.

Ask your LINDE jobber about OXWELD rods, fluxes and other welding accessories. Or write LINDE AIR PRODUCTS COMPANY, a Division of Union Carbide and Carbon Corporation, 30 East 42nd Street, New York 17, N. Y. In Canada: Dominion Oxygen Company, Toronto.

See your LINDE Jobber

The terms "Linde" and "Oxweld" are registered trade-marks of Union Carbide and Carbon Corporation.

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ALL MAINTENANCE WORK ON McLEAN'S FLEET takes place in the big shops of Modern Automotive Services, Inc., under the personal supervision of Vice President and General Manager C. G. Egger (at right)

GMC factory-engineered replacement parts are used almost exclusively. Egger feels that GM research has kept them ahead of the industry. And he's impressed by the warranty covering each part. "I know from experience that GMC stands behind their products," he said.

A tip for you? Why not follow the lead of America's top truck lines—by using GMC factory-engineered parts for *every* GMC replacement need. Especially when they're always quickly available through your GMC dealer!



—best part of any service job

GMC Truck & Coach—A General Motors Division

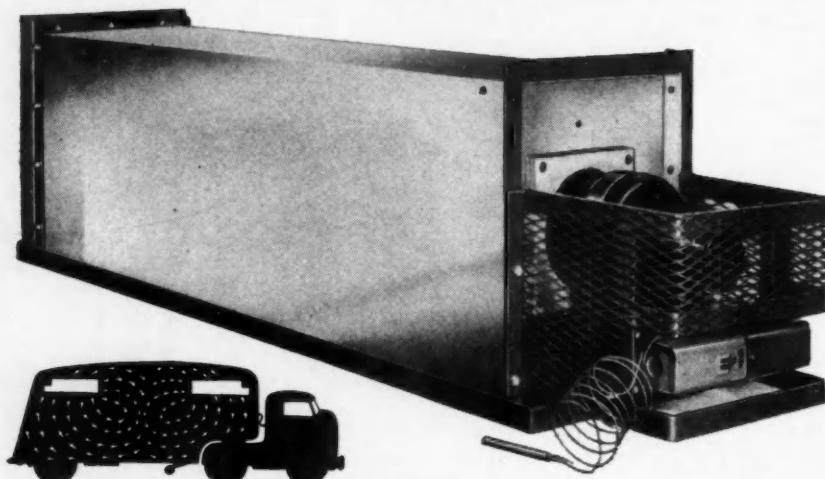


You can't beat
FOSTER-BUILT
DRY ICE BUNKERS FOR

Low Cost Truck Refrigeration

Foster-Built does it again! Another Foster-Built First in truck refrigeration... the New Frigi-Matic Auto-

matic Temperature Control Bunker! If you want increased payloads and profits... here's the answer.



Only Foster-Built offers you complete truck refrigeration at such low cost. Bunkers as low as \$65.

NEW Foster-Built Frigi-Matic is the DeLuxe Model. Both 2-block and 4-block units come completely equipped with Frigi-Matic Temperature Control.

Now with Temperature Control

New Efficiency: You're sure of positive temperature control at all times. Frigi-Matic maintains constant temperatures, with a range from 0° to 70° F. Air is "double-shot" through unit for efficient frigidty.

New Operating Savings: Accurately controlled temperatures assure savings in operating costs. Cuts dry ice consumption.

No Maintenance: Absolutely no upkeep. The rugged simple design of Foster-Built Bunkers eliminates repair bills.

Bigger Payloads: The compact size of Foster-Built Bunkers permits maximum truck capacity. Result: Bigger Payloads!



Frigi-Matic Temperature Control is also available as an accessory for installation with your present Foster-Built Bunker. It will pay for itself in a short time! Only... \$25.

Mail this
Coupon
today...

for Complete Information
Or phone: MOncree 6-6880

Foster-Built Bunkers, Inc.
757 W. Polk Street, Chicago 7, Illinois

CCJ-6

Gentlemen: Please send information on:

- ☐ Frigi-Matic Dry Ice Bunker ☐ Dry Ice Warehouse List
☐ Complete line of Foster-Built Bunkers

Name

Company

Address

City

Zone

State

New Products

Continued from Page 176

the amount of air passing over the commutator, thereby providing a "cool-running" motor. "Vitri-Glaze" is formulated for use with the new polishers so as to perform a superior job of removing road scum and paint chalk, as well as polishing automobile finishes.

P35. Dump Body

Galion Allsteel Body Co., Galion, Ohio, announces a new general purpose dump body, of 2 cu yd capacity and designed for mounting on 1-ton pick-up trucks. Known as the "Handi-



man," the new body is available in both fixed and removable side types. Both models are offered in lengths of 7½ and 8 ft, are 78 in. wide inside. Side height is 12¾ in. and head and tailgate are 6 in. higher than sides. Bodies are suitable for mounting with Galion Allsteel Model No. 334N hoists of 4-ton capacity, on trucks with a cab-to-axle distance of 60 in. Galion Model No. 600 Fulcrumatic hoist of 6-ton capacity can also be used.

P36. Mobile Radio

Link Radio Corp., New York City, has announced the addition of the new Model No. 2365-M-Ed. 8 mobile combination transmitter-receiver to its line of two-way radio communication equipment. This unit, which operates in the 25-50 megacycle band (25-30 watts output), is designed to work from either a 6 or 12-volt battery without wiring, component or cable changes.

P37. Aluminum Putty

Smooth-On Mfg. Co., Jersey City, N. J., has announced a new aluminum putty which shrinks less than 2/10 of one per cent while hardening and will not crack in thick applications for building up metal surfaces or for caulking seams and holes in metal and wood surfaces. It hardens to a metallic density at room temperatures.

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Please Resume Reading Page 88

COMMERCIAL CAR JOURNAL, June, 1955

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THREE TYPES: Hypoid-helical double-reduction, optional inter-axle differential. Worm drive, without inter-axle differential.



For six-wheeler operation . . .

THE TDA TANDEM DRIVE REAR AXLE UNIT

Now—the world's finest tandem drive rear unit for heavy-duty motor trucks!

And with these features, developed, introduced and pioneered by TDA: (1) Available in 3 types of final drives and 3 capacities. (2) Top-mounted straight-line final drive eliminates propeller shaft angularity. (3) Optional inter-axle differential . . . spur gear design, cab-controlled power-lockout. (4) Torsion flow axle shafts . . . guaranteed for 100,000 miles or three years, whichever occurs first. (5) Hot forged steel axle housing . . . guaranteed for the life of the vehicle. (6) Unit-mounted "P" series power brakes . . . for

longer life, greater economy and efficiency. (7) Cradle ride spring suspension and paralleled torque rod system . . . maintain correct alignment and weight distribution regardless of driving and braking conditions. (8) Exclusive two-piece trunnion tube bracket speed servicing. (9) Removable torque rod and spring guide brackets . . . for positive alignment, easier replacement. (10) Rubber torque rod bushings and rubber spring seat bushings . . . eliminate metal-to-metal contact. Require no lubrication.

WITH TDA TANDEMS

Differential that permits

TIMKEN *Detroit* AXLES

TIMKEN-DETROIT AXLE DIVISION
ROCKWELL SPRING AND AXLE COMPANY
DETROIT 32, MICHIGAN

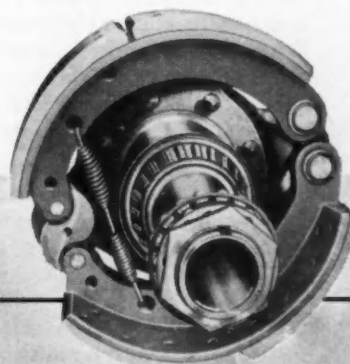


TRADE MARK REGISTERED

World's Largest Manufacturers of Axles for
Trucks, Buses and Trailers

Plants at: Detroit, Michigan • Oshkosh, Wisconsin • Utica,
New York • Ashtabula, Kenton and Newark, Ohio
New Castle, Pennsylvania

**ONLY TDA BRAKES give
all these tested advantages!**



• Brake shoes made of steel save up to 40 pounds per axle . . . give strong braking action with no distortion.

• Patented liner shape—thickest where wear is greatest.

• Liners riveted on—no chance of movement on shoe.

• Liners circle-ground to cover all efficient braking area of shoe.

• Rustproofed anchor pins locked in. Ends of pin sealed against foreign matter.

• First with self-aligning camshaft housings.

• Cam rollers heat-treated to roll smoother, wear longer.

• First with all-Nylon camshaft bushings.

• Compare similar products part for part and prove to yourself that TDA brakes incorporate the finest quality materials, skilled workmanship and advanced design.

ATA Spring Meeting of E & M Council

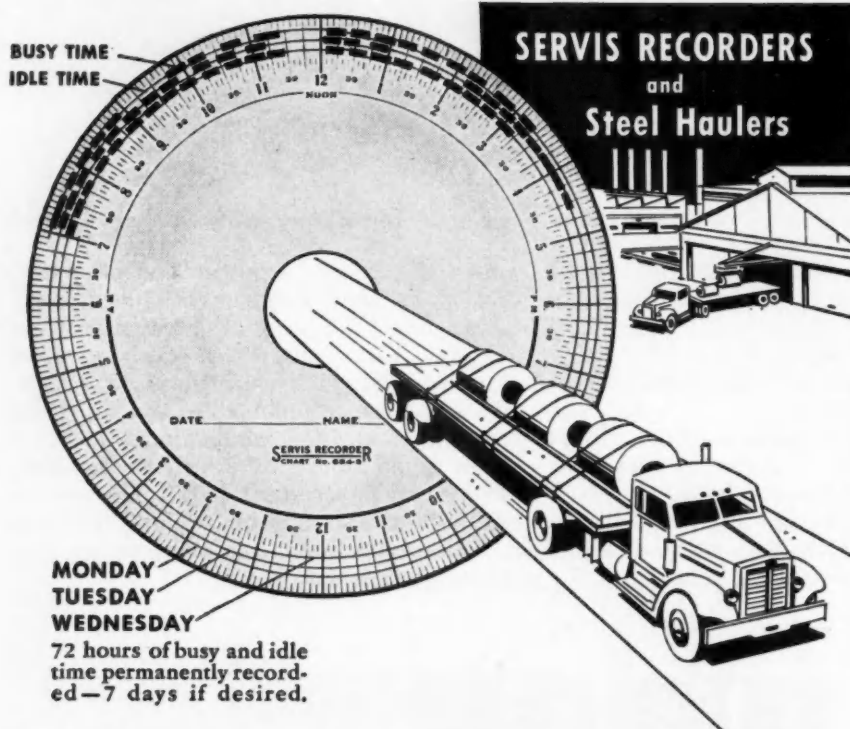
Continued from Page 96

demonstration conducted at the State Fairgrounds on Tuesday evening. Six lighting patterns—one showing the present minimum rear lighting prescribed by ICC—were demonstrated to more than 150 engineers who were asked to vote their preference. The objec-

tive was to establish a lighting standard which may be voluntarily adopted by the trucking industry to promote greater highway safety.

The ballots showed the two brightest patterns displayed—each providing about three times as much illumination as now re-

quired—were the first and second choices of the fleetmen. One pattern had only a slight edge over the other. It is recognized, of course, that adoption of voluntary standards throughout the industry can be accomplished only over a fairly lengthy period of time, but according to experts in the field, this is the most effective method of obtaining industry-wide acceptance of up-to-date safety improvements. The approved patterns were recommended to the Steering Committee for further study.



SERVIS RECORDERS HELP DELIVER SAFELY, PROFITABLY, ON TIME

Steel haulers find answers to their major problems—safe, efficient delivery reliably dovetailed with manufacturers' production needs—with Servis Recorders. These compact, dependable instruments chart permanent, easily-read records of travel and idle time each trip.

Tamperproof, Servis Recorders defend the good driver; give management unquestioned authority to find out about long fueling stops or unusual delays that encourage speeding to "make up" time. Servis Recorders with either one day, three day, or seven day charts prove the fairness in schedules; improve efficiency and morale, and insure satisfaction from shipper and consignee.

For full details ask for free illustrated booklet, "Ten Ways of Getting More Work Out Of Motor Trucks." The Service Recorder Co. 1375F Euclid, Cleveland 15, Ohio.

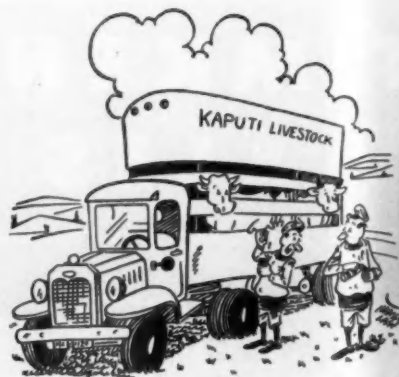
The Servis Recorder
Tells Every Move Your Truck Makes



Shop Hints

A midweek session moderated by Murray Simkins, CCJ's managing editor, highlighted a series of home-made shop tools designed by mechanics to perform certain jobs quicker, easier and safer than those which are currently available. Speakers Lew Hankins of Hemmingway, Walter Neumann of Willett, and Fred Grumme of Aero Mayflower presented over 100 slides showing what can be done by "invention-prone" mechanics to augment their tools and equipment. The speakers went further to discuss incentive systems for cultivating ideas from the men and showed definite time and labor savings enjoyed in their respective fleets with the installation of this home-made equipment. A feature story on this symposium will be published in an early issue of CCJ.

Another interesting session on Wednesday morning featured two speakers from industry. George M. Galster of Champion Spark (TURN TO PAGE 188, PLEASE)



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MILE WARRANTY

in your next truck!

At last—you can buy truck engine performance *by the mile*. This 100,000 mile warranty backs up the full line of revolutionary Reo Gold Comet Engines. Every Six from 107 to 160 horsepower. Every V-8, from 195 to 220 horsepower; pound for pound, these are the *most powerful truck engines ever built*. All short stroke! All wet sleeve cylinder con-

struction! All high velocity cooled! Your choice of gas or LP-Gas. By every comparison Reo has the most completely modern truck engines on the road. So now, *it's a provable fact*. The day is here when buying less than a Reo truck for medium or heavy duty hauling *can cost you money*. Get all the facts from a Reo man today. You'll be glad you did!

REO

SUBSIDIARY OF **BOHN** ALUMINUM AND BRASS CORPORATION

Reo Motors, Inc., Lansing 20, Mich. • Toronto, Ontario



E & M Council Meeting

Continued from Page 184

Plug Co., outlined some of the factors affecting spark plug life, showing by means of slides where and how fouling and burning develop under various operating conditions. Excerpts from this paper will appear in the July issue of CCJ due to space limitations at this time.

F. D. Fountain of The Budd Co., reviewed some of the new developments in Budd wheels at this session. He showed diagrams of some of the experimental lug bolts which may reach the market eventually and described in detail new type, single cap nut mounting studs now available for those who require them. Mr. Fountain went into some of Budd's progress with weight reduction in wheels, mentioning the aluminum type as well

as the high tension steel type unit.

Officers for 1955-56

N. L. Parks, of Meridian, Miss., today was elected chairman of the Council. Parks is with the Dixie Highway Express. He succeeds Fred Grumme, of Indianapolis, Ind., who becomes a member of the council's board of directors. Other equipment council officers elected are: J. B. Callan, Central Truck Lines, Waco, Tex., first vice chairman. W. W. Vandercook, F. J. Boutell Driveaway Co., Pontiac, Mich., second vice chairman. Walter Neumann, Willett Company, Chicago, Ill., third vice chairman. Murray Simkins, COMMERCIAL CAR JOURNAL, Philadelphia, Pa., treasurer. Lewis C. Kibbee, American Trucking Assns., Washington, D. C., Secretary.

Safety Officers for 1955-56

W. T. Gowens, Director of Safety and Personnel of the Pilot Freight Carriers, Inc., Winston - Salem, North Carolina, was elected Chairman of the Council of Safety Supervisors. He succeeds Max R. Jensen, Consolidated Freightways, Portland, Oregon. Other officers chosen are: P. E. Mondics, Director of Safety, East Texas Motor Freight, Dallas, Tex., first vice chairman. Joseph T. Jenkins, Director of Safety, Mason and Dixon Lines, Inc., Kingsport, Tennessee, second vice chairman. Ernest Barber, Director of Safety, Scheren Freight Lines, Ottawa, Ill., third vice chairman. Goley D. Sontheimer, American Trucking Associations, Washington, D. C., secretary.

END

Please Resume Reading Page 97



"You're the same guy that ran off with one of our trays last week aren't you?"



ARE YOU CUTTING YOUR DOCK TRANSFER COSTS?

IF YOU MOVE MORE THAN 25 TRAILERS PER DAY . . . YOU CANNOT AFFORD TO BE WITHOUT THE BARTLETT SPOTTING HYDRAULIC 5TH WHEEL.

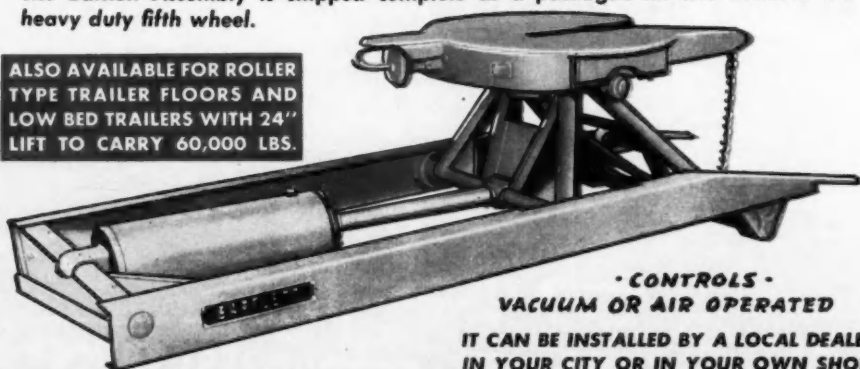
YES . . . DOCK SPOTTING COSTS CAN BE CUT $\frac{2}{3}$ WITH THIS BARTLETT "SPEEDY" LIFTING FIFTH WHEEL . . . IT WILL LIFT 50,000 LBS. 14" HIGH.

RECOGNIZED AS THE BEST EXPEDIENT NOT ONLY IN SPOTTING TIME BUT BY ELIMINATING DAMAGE TO TRAILER SUPPORTS, BODY NOSE PUSH-UPS, NOSE DIVING AND COUPLINGS.

THE BARTLETT SPECIAL FIFTH WHEEL IS REINFORCED TO GIVE YEARS OF UN-INTERRUPTED SERVICE. IT HAS HAD 7 YEARS OF ENDURANCE TESTS UNDER THE HARDEST SERVICE BY ALL TRUCKERS NATIONALLY.

The Bartlett Assembly is shipped complete as a packaged kit and includes the heavy duty fifth wheel.

ALSO AVAILABLE FOR ROLLER TYPE TRAILER FLOORS AND LOW BED TRAILERS WITH 24" LIFT TO CARRY 60,000 LBS.



CONTROLS -
VACUUM OR AIR OPERATED
IT CAN BE INSTALLED BY A LOCAL DEALER
IN YOUR CITY OR IN YOUR OWN SHOP.

BARTLETT TRAILER CORPORATION

3080 ARCHER AVE. • CORNER OF ASHLAND • CHICAGO 8 • VIRGINIA 7-1160

June New

AVL Raises

The truck undertook a project, the "Motor" raised more of cerebral palsy was composed model vans so that they could be using a three-year campaign conducted by agents of the project "torcade" was Van agents of

PMTA Aids

A fleet of trucks Pennsylvania joined nearly Philadelphia carded clothing

Does not

In millions of

Interstate

Primary

Secondary

Urban

Total

Total Annual

1—Amount urban highways

THE ABOVE aid highway lists the amount month by the Still to be HR4260, incorporation, 10-year highway is listed in the In addition grams are for allocate federal years as compared years as proposed

COMMERCIAL C

June News Roundup

Continued from Page 108

AVL Raises \$50,000 for CP

The trucking industry recently undertook a community service project, the "Motorcade of Hope," which raised more than \$50,000 for victims of cerebral palsy. The "Motorcade" was composed of hundreds of scale model vans which were slotted at top so that they could act as "banks" during a three-week fund-raising campaign conducted in 440 cities by 600 agents of Allied Van Lines, sponsor of the project. The goal of the "Motorcade" was \$50,000 and the Allied Van agents overshot it by \$1,500.

PMTA Aids Handicapped

A fleet of trucks volunteered by the Pennsylvania Motor Truck Assn. joined nearly 50,000 Boy Scouts in a Philadelphia area round-up of discarded clothing and household articles

1955 Domestic Truck Factory Sales by G.V.W.*

	5,000 lb and less	5,001- 10,000	10,001- 14,000	14,001- 18,000	18,001- 22,000	22,001- 26,000	26,001- 30,000	Over 30,000	Total
January	37,040	12,271	3,300	12,036	3,176	2,704	3,342	72,949	
February	25,500	9,113	2,319	9,083	2,800	2,910	3,520	55,253	
March	43,294	14,454	3,543	14,871	2,671	2,958	4,279	88,070	
Total—3 Mos. 1955	105,834	35,838	9,162	35,990	8,655	8,572	11,141	215,272	
Total—3 Mos. 1954	114,242	45,149	9,483	40,705	8,739	13,257	9,610	241,185	

*—Automobile Manufacturers Association.

to aid Goodwill Industries of America, Inc., in its program of providing training and employment for handicapped and disabled persons. The big trucks provided by the Association made pick-ups at more than 128 collection depots.

Aluminum Body

A new entry in the aluminum truck body field has been announced by Dayton T. Brown Corp., Copiague, N. Y. Merchandised under the tradename of Airvan 126, parcel delivery bodies for stripped Ford P-350 chassis are now being turned out on an assembly-line basis at the company's Long Island plant. Although present production is tailored to the Ford 122-in. wheelbase chassis, units for the new Chevrolet

forward control chassis which will be on the market in mid-summer. Featuring cargo space of 410 cu ft with a curb weight of 3850 lb, the new Airvan when mounted on 750x16 tires permits a payload of approximately 3250 lb.

Industry Advisory Groups

In the event of war, Business and Defense Services Administration plans to impose a 90-day stabilization period on vehicle and related manufacturing industries. As tentatively considered, production in the period would be limited to a percentage of each manufacturer's planned schedule for the three months. Presumably, at the end of the period or earlier, the gov-

(TURN TO PAGE 228, PLEASE)

Estimated Annual Federal-Aid Highway Proposals

Does not include federal funds for forest highways nor state and local funds for non-federal-aid rural roads and city streets.¹

In millions of dollars	Present Program		President's Proposal as Incorporated in HR4260		Senator Gore's Proposal—S1048		Senator Case's Proposal—S1573		Senate Roads Subcommittee Draft		Senate Public Works Committee Bill as Passed—Amended S1048	
	Federal	State & Local	Federal	State & Local	Federal	State & Local	Federal	State & Local	Federal	State & Local	Federal	State & Local
Interstate	\$ 175	\$ 117	\$2500 ²	\$ 200	\$ 500	\$ 250	\$ 900	\$ 100	\$1540	\$ 520	\$1550 ³	\$ 172
Primary	315	315	315	315	500	500	360	360	1100	1100	400	400
Secondary	210	210	210	210	325	325	360	360			300	300
Urban	175	175	75	75	275	275	90	90			200	200
Total	\$ 875	\$ 817	\$3100	\$800	\$1600	\$1350	\$1710	\$ 910	\$2640	\$1620	\$2450	\$1072
Total Annual Program	\$1692		\$3900		\$2950		\$2620		\$4260		\$3522	

¹—Amounting to \$22½ million a year for forest highways and about \$6200 million annually for non-federal-aid roads. ²—Includes urban highways on the interstate system. ³—Average per year.

THE ABOVE CHART compares the various federal-aid highway programs proposed. Column at far right lists the amounts as included in S1048 as passed late last month by the Senate.

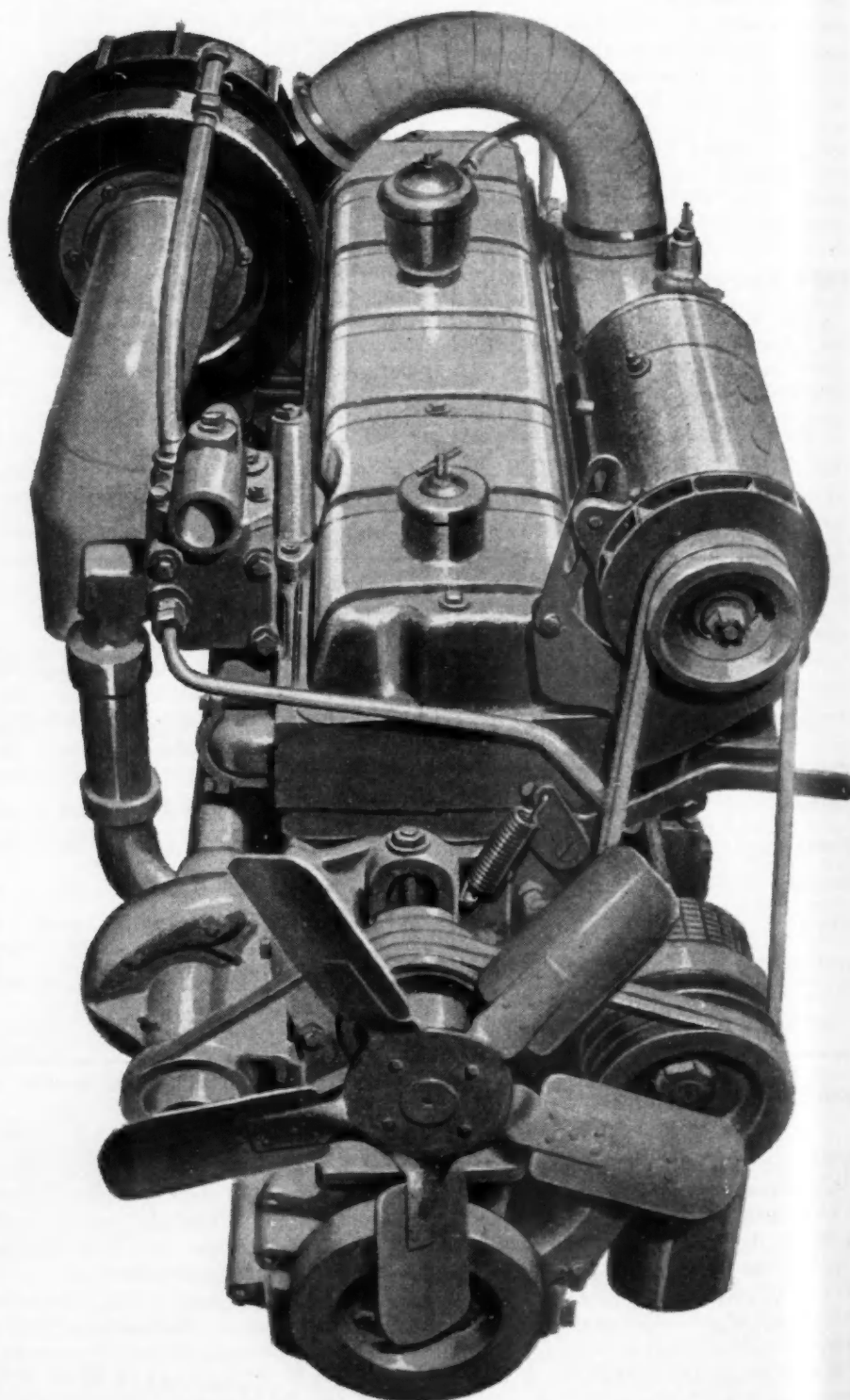
Still to be acted on in the House at press time was HR4260, incorporating President Eisenhower's \$101-billion, 10-year highway program. Financing of this proposal is listed in the second column from left.

In addition to the differences in amounts, the two programs are for a different length of time. S1048 would allocate federal funds of \$2450 million a year for five years as compared to \$3100 federal funds a year for ten years as proposed in HR4260.

At House hearings on HR4260, ATA said that no additional federal highway user taxes should be needed, added that the trucking industry would go along with a 1¢ per gal increase in the federal gas tax "... if Congress determines that such an increase is the only feasible way of getting the interstate system of highways."

Meanwhile, Private Truck Council of America reports a White House source as saying that if HR4260 is passed, present federal automotive excise and gasoline taxes would become a permanent part of the tax system. Adds PTC, "It is evident, however, that many governors, as well as members of Congress, have given up any idea of these taxes ever being repealed."

new 175



CUMMINS JT-6 TURBODIESEL

Brake horsepower . . . 175
 Governed RPM . . . 2500
 Bore and stroke . . . 4 $\frac{1}{8}$ " x 5"
 No. of cylinders . . . 6
 Piston displacement . . . 401
 Net weight with
 standard accessories . . . 1615

In 1952, 1953, and again in 1954...
 Cummins Diesels powered more
 new trucks than all other makes
 of diesels combined!

LIGHTWEIGHT

Here's the new
 Turbodiesel
 schedules at
 the advantage
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This compares
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 Turbocharging
 by harnessing
 ... boosting

EXPANDS

Now diesel ac-
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175 h.p. Cummins Turbodiesel!

LIGHTWEIGHT... POWERFUL!

Here's the new, lightweight Cummins that delivers 175 Turbodiesel horsepower for bigger payloads, with faster schedules at lower costs. Now you can be sure of getting all the advantages of diesel power and diesel economy minus the handicap of any excess weight.

This compact JT Turbodiesel is light even when compared to gasoline engines of similar horsepower! It's Cummins Turbocharging that provides this amazing low-weight power by harnessing energy in exhaust gases that's normally wasted ... boosting engine efficiency.

EXPANDS RANGE OF DIESEL USE!

Now diesel advantages are available to truck operators in *all* parts of the country. The JT can be advantageously used in states with a 45,000 lb. weight limit ... by operators who haul short runs or log low annual mileages. You can now carry as much as 800 pounds more payload compared to other diesels! Genuine Cummins parts and factory-service facilities are always near you.

Q. How much can this new Turbodiesel save you in a year?

A. Multiply your annual truck or fleet mileage by 2¢ (the minimum per-mile saving based on fuel and maintenance economy compared to gasoline engines) and the result is a sample of the kind of saving you can have with the JT.

FUEL AND MAINTENANCE ECONOMY!

Fifteen million miles of on-the-job performance have shown actual fuel savings averaging from two to three cents a mile compared to gasoline engines.

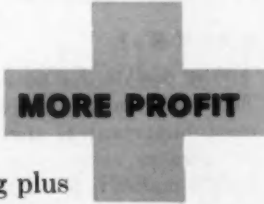
Maintenance on the JT is comparable to gasoline engine maintenance; and Cummins new lower parts prices help reduce maintenance costs even further. The exclusive PT fuel system is simpler ... more economical than gasoline carburetion and ignition ... use of No. 2 diesel fuel means added savings. All of these savings can pay off any price differential within a comparatively few months ... giving you more profit over the entire life of your equipment.

NOW STANDARD IN NEWEST TRUCKS!

The newest space-saver models of leading truck manufacturers feature the JT as standard diesel power. Some of these models are shown on the following pages. You can arrange with your local Cummins distributor to have a Turbodiesel pilot installation in one of your present chassis, or to see a JT-powered demonstrator in your area.



CUMMINS



MORE PROFIT

gives you the big plus

Cummins Engine Company, Inc.
Columbus, Indiana

Please send me, without charge or obligation, full details on the new JT Turbodiesel.

_____ I am interested in using it in new trucks.

_____ I am interested in repowering my present trucks.

Name _____

Position _____

Company _____

Address _____

City _____ Zone _____ State _____

CCJ-4

What's Ahead in Truck and Bus Developments?

By Joseph Geschelin

WHAT IS ahead in mechanical advancement in trucks and buses? Important engineering developments are in the offing—some to appear before the year is out; others pretty far down the road. All are of interest to fleet men not only in planning equipment improvements but in visualizing the shape of things that will affect shop set-ups as well as maintenance procedures.

Biggest news comes from the power plant field. It has taken a little time, but the clean sweep of V-8 engines in passenger cars has had enough momentum to break into the heavy duty vehicles as well. To go back a little, LeRoi was the first of the independent engine builders to launch high powered V-8's for trucks. Last year saw Reo enter the scene with its advanced-type, high performance engine. This was followed only recently by announcement of the line of gasoline and diesel V-8's by Continental.

Last month GMC made its announcement of the availability of two V-8's in its 1955 line. And later this season we expect similar news from another of the important old line truck manufacturers.

That big V-8's of modern design—high compression, high performance, high economy type—are in the picture is no longer speculation.

Why V-8's?

Why the V-8 for heavy duty trucks? There are many good reasons. But the most important is that the V-8 with its greater compactness and shorter length makes it possible to build short nosed tractors and trucks fully capable of meeting overall length restrictions.

The future of diesel engines was viewed in much detail by C. G. A. Rosen, SAE president, at the recent SAE Annual Meeting. Down the road he sees the necessity for solving some currently troublesome problems: improved fuel ignition characteristics; improvement in combustion to dispel noise, smoke, and odor; to develop major component parts so as to make engines capable of higher output per cu in.; and to simplify diesel engine design in the interest of lower cost. Rosen mentioned too that the future

outlook depended a lot upon the course of diesel fuels from the standpoint of cost, quality, and availability.

In the case of both diesel and gasoline engines, there is a promise of major gains in bhp/cu in. out of the same displacement through the adoption of the latest types of turbochargers. This is something to watch in the near future. One line of turbochargers now in the preparatory stages claims to be able to increase output by as much as 100 per cent—on modern engines capable of handling such an increase.

Gas Turbines?

What about the gas turbine? We have speculated on this on several occasions. We did not go along with the enthusiasts who predicted the emergence of gas turbines about now. We know that every large manufacturer is doing a lot of experimental work with gas turbines. We know that General Motors has one in an experimental GMC bus. While the gas turbine is a practical machine—after all, it is flying in military airplanes—the big problem is low thermal efficiency, i.e., it burns too much fuel for the amount of power it puts out.

Permit us for the time being to shift the burden to an expert. Speaking at the recent SAE Annual Meeting, C. A. Lindblom of IHC said that although light-weight turbines will be mechanically practical in the near future, their high fuel consumption and high initial cost should preclude extensive use in trucks and buses for 25 years. So at the moment gas turbines are still problematic—in the future 25 years or maybe something less.

Automatic Drives?

The power train appears to be due for a thorough overhauling. Automatic transmissions are no longer new in the truck field. They have been available on light duty vehicles for some time, more recently offered on GMC heavy duty jobs as well, in the form of the big Hydra-Matic drive with 13 speeds forward.

What is news is that several of the major suppliers now are grooming automatic drives. Spicer showed a version of a torque converter job at the SAE Annual Meeting.

June News Roundup

Continued from Page 225

ernment would establish the program for the duration of the emergency. Industry Advisory Committees met last month to begin working out practical plans.

GMC Powerama

Turbine-powered vehicles will be among the features of General Motors' "Powerama" scheduled for Aug. 31-Sept. 25 in Chicago. Displays will include trucks, military vehicles, earth movers, off-highway equipment. Stage shows and other entertainment are planned.

Trailer Design

Long range tractor-trailer design changes are being considered by truck makers. One idea is integration of combination into a single unit to get more maneuverability, higher cube, better weight distribution. Problem is flexibility. Present ratio is about three trailers to one tractor for interchange.

Studebaker Survey

Results of a user survey on design features of the 1955 Studebaker two-ton truck have been released by the company's truck department. New short-stroke V-8 engine was rated by

1955 Truck Trailer Shipments*

	March	Three Months
Vans:		
Insulated and Refrigerated:		
Steel	127	308
Aluminum	338	867
Furniture:		
Steel	196	428
Aluminum	8	28
All other closed-top vans:		
Steel	722	1,906
Aluminum	2,085	5,114
Open-top:		
Steel	137	282
Aluminum	162	393
Total—Value	3,775	9,263
Tanks:		
Petroleum	351	976
All other	73	192
Total—Tanks	424	1,128
Pole, Pipe and Logging:		
Single Axle	56	164
Tandem Axle	117	290
Total	173	444
Platforms:		
Racks, livestock and stake	126	310
Grain bodies	65	169
Platforms (flat), all types	685	1,622
Total—Platform	856	2,121
Low-bed heavy haulers	286	682
Dump trailers	174	351
All other trailers	385	1,191
Total—Complete Trailers	6,073	15,120
Chassis only	262	607
Total—Trailers and Chasse	6,335	15,727

*—Industry Division, Bureau of the Census.

owners and the survey as their satisfaction. Second to engineering steering ease, a comfortable ratio of corporate a for straight higher ratio sively as the

International

A United mission for party of road perts has co final draft of contracts for of goods by tion, regulati ternational o tomers, is bei ments with a make their o Nov. 1, 1955. port Commit in 1956 for a sider any fin convention fo



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... Griswold George B. Ho ident, New J Newark, N. J

... Asa J. Section of ment, Bureau ance, Interst sion, Washing

... Edward F. uly commiss search, Burea of Commerce

... Dillard erations mar Dallas, Texa

... Glenn F. president - op Pittsburgh M burgh, Pa.

... Raymond sistant saf Freight Line

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Three Months
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188
1,822
2,121
662
351
1,151
15,120
607
15,727

nsus.

June, 1955

owners and drivers participating in the survey as the principal reason for their satisfaction with the truck. Second to engine performance, is the steering ease provided through variable ratio cross steering, which incorporates a low steering gear ratio for straight-ahead driving, and a higher ratio that increases progressively as the wheel is turned.

International B/L

A United Nations Economic Commission for Europe (ECE) working party of road transport and legal experts has completed in Geneva the final draft of a convention relating to contracts for international carriage of goods by road. The draft convention, regulating relations between international carriers and their customers, is being dispatched to governments with an invitation for them to make their observations on it before Nov. 1, 1955. The ECE Inland Transport Committee will then fix a date in 1956 for a special session to consider any final details and open the convention for signature.



INTRODUCING . . .

. . . John W. Powell, promoted to director of transportation, Greyhound Corp., Chicago, Ill.

. . . Griswold B. Holman, president of George B. Holman & Co., elected president, New Jersey Motor Truck Assn., Newark, N. J.

. . . Asa J. Merrill, appointed chief, Section of Motor Carrier Enforcement, Bureau of Inquiry and Compliance, Interstate Commerce Commission, Washington, D. C.

. . . Edward H. Holmes, appointed deputy commissioner in charge of research, Bureau of Public Roads, Dept. of Commerce, Washington, D. C.

. . . Dillard V. Radke, appointed operations manager, Best Motor Lines, Dallas, Texas.

. . . Glenn Benton, promoted to vice president - operations, Baltimore & Pittsburgh Motor Express Co., Pittsburgh, Pa.

. . . Raymond Nelson, promoted to assistant safety director, Hennis Freight Lines, Winston-Salem, N. C.

. . . Thomas B. Wilson, appointed deputy undersecretary of transportation, Dept. of Commerce, Washington, D. C.

(TURN TO PAGE 230, PLEASE)

new



Diamond T "Space Saver" with Cummins 175 h.p. Turbodiesel

Here's Diamond T's new model 723-C JT Tilt-Cab tractor that gives you 175 Turbodiesel horsepower and lets you hitch on a 35-foot trailer without exceeding 45-foot overall length. The JT-6 Turbodiesel is also available in conventional design Diamond T model 723 JT.

With the new, compact 175 h.p. Turbodiesel, these tractors now give you all the advantages of diesel power . . . all the savings of diesel economy . . . without any sacrifice in payloads . . . with maintenance costs as low as gasoline engines!

For complete specifications, visit your Cummins distributor or your Diamond T dealer.



gives you the big plus

MORE PROFIT

In 1952, 1953, and again in 1954 . . .

Cummins Diesels powered more new trucks than all other makes of diesels combined!

Wrigley's Stores' Drivers Drive Safely, Share in Bonus

WRIGLEY'S STORES, INC., Detroit, is trying out its first truck safety program. Up until last July, the 23-year-old firm, which operates 58 supermarkets in the Detroit area, never had a safety program for truckers. Realizing, though, that it needed one for a long time, company executives and some 40 drivers sat down at a dinner earlier this year to chart some sort of plan which would give the driver himself more recognition.

Today, less than six months since the program was put into operation, company executives have already seen the dividends that the plan has paid. Truck drivers are more safety-conscious than they ever have been, and attach such big importance to safety that they talk about it over the dinner table at home.

Wrigley's operates 60 semi-trailer combinations and six trucks, haul about 2000 tons of grocery goods a week in the Detroit area.

Set Up Award Fund

Under the basic safety plan, the company allocates \$1,500 to a Safety Award Fund every six months. When-

ever a trucker gets into an accident, the cost of repairs is deducted from the Fund, and any amount that is left over after six months is distributed among the drivers on a pro-rated basis according to each one's record. If the cost of collision repairs is less than \$500 in any six-month period, the difference between the actual cost of repairs and \$500 is added to the award fund.

Demerits Subtract Dollars

The company awards 30 honor points to a truck driver every six months, which entitles him to participate in the award fund. His award is based on the number of points he has to his credit at the end of each six-month period. Under the schedule that has been set up, the driver can lose half of these points if he is responsible for damages on his truck which exceed \$500. On the other hand, a driver can keep building up these points if he maintains an accident-free record in each six-month period.

Even if he should get involved in an accident he can still retain these points if the Trial Board decides that the accident is not chargeable to him. The trial board is made up of two company executives and three truck drivers, who decide whether a driver should be "charged" for an accident.

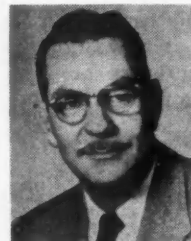
For example, if the accident is chargeable to the truck driver he incurs demerits according to the following schedule: If cost of repair to the vehicle is \$10 or less the driver gets 1 demerit; \$10-25, 2; \$25-50, 3; \$50-75, 4; \$75-100, 5; \$100-150, 6; \$150-200, 7; \$200-300, 8; \$300-400, 9; \$400-500, 10; and \$500 or over, 15 demerits.

A similar schedule applies to injuries incurred in an accident. Drivers who fail to report an accident lose all points accumulated during the six-month period.

Just what have been the results of the program so far? The second report, covering September and October, showed costs of minor repairs on trucks down more than 50 per cent under the first two months. "Everyone from top management to the truckers' families has shown enthusiasm over the program," points out Wrigley's.

June News Roundup

Continued from page 229



... Roger W. Robinson, sales manager, Transmission Division, Clark Equipment Co., Jackson, Mich.

... Willis C. Brown, promoted to director of safety and operations, Central Transfer Co., Peoria, Ill.

... Matthew Mahon, president of Mahon's Express Co., elected president, Local Cartage National Conference, American Trucking Assns., Washington, D. C.

... Byron S. Snowden, assistant sales manager-trucks, Dodge Division, Chrysler Corp., Detroit.



... John M. Seanor, promoted to manager of Alemite product sales to original equipment customers, Detroit sales office, Division I, Stewart-Warner Corp., Chicago.



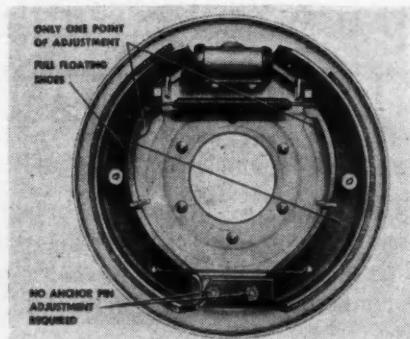
... Edward H. Rice, sales manager-trucks in charge of field operations, Dodge Division Chrysler Corp., Detroit.

... W. M. May, promoted to chief engineer, Mack Trucks, Inc., New York City. His office will be at the main assembly plant, Allentown, Pa.

... John C. Holley, left, vice president and director of sales, and Edwin R. Stroh, right, vice president and automotive sales manager, Holley Carburetor Co., Van Dyke, Mich.



Floating Shoe Brakes



Diveco delivery route trucks now offer new 14 x 2-in. floating shoe brakes as standard equipment. It has only one point of adjustment. At 25 mph, the brakes will be 15 per cent more effective than previous Diveco brakes. Increased effectiveness becomes greater with higher speeds. Floating action of the shoes permits them to wrap into the drum and get contact with the full length of the lining at all times. The new brake can be installed on trucks now in the field manufactured after January, 1938. Anchor pins have been removed.

... Melvin Spooner, appointed brake lining representative for Oregon, Washington, western Montana and northwestern Idaho, Grizzly Mfg. Division, Pauling, Ohio.



... Henry K. Evans, special assistant to vice president - operations, Pacific Intermountain Express, Oakland, Cal.

... Roland S. Withers, promoted to general manager, United Motors Service Division, General Motors Corp., Detroit.

... Ewald R. Olson and Joseph A. Farnell, appointed New York and Atlanta Division truck and bus tire representatives respectively, Dunlop Tire & Rubber Corp., Buffalo, N. Y. Olson was with White Motor Co. and Farnell with Rubber & Tire Materials Co.



... Gordon E. Williams, truck tire sales manager, The Dayton Rubber Co., Dayton, Ohio.

... Leslie G. DeMotte, promoted to advertising and sales promotion manager, Willard Storage Battery Co., Cleveland, Ohio.

... Miss Isabelle Smullen, promoted to advertising manager, Globe Hoist Co., Philadelphia, Pa.

(TURN TO PAGE 233, PLEASE)



"Here's another one that ain't going to dim, Joe!"

COMMERCIAL CAR JOURNAL, June, 1955

new



Four Wheel Drive T-645-D with Cummins 175 h.p. Turbodiesel

FOUR WHEEL DRIVE'S new over-the-highway truck, T-645-D, gives you 175 Turbodiesel horsepower. When FWD decided to enter the on-highway field, the engine selected for their diesel model was the Cummins JT Turbodiesel.

This compact engine provides economical diesel power minus the handicap of excessive weight or bulk. Now Cummins Turbodiesel advantages are open to operators who haul short runs . . . log low annual mileages. Genuine Cummins parts and factory service facilities are near you wherever you operate.

For complete specifications, visit your Cummins distributor or Four Wheel Drive representative.

CUMMINS

gives you the big plus

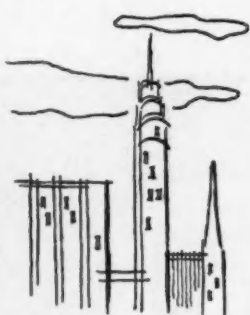
MORE PROFIT


In 1952, 1953, and again in 1954 . . .

Cummins Diesels powered more new trucks than all other makes of diesels combined!

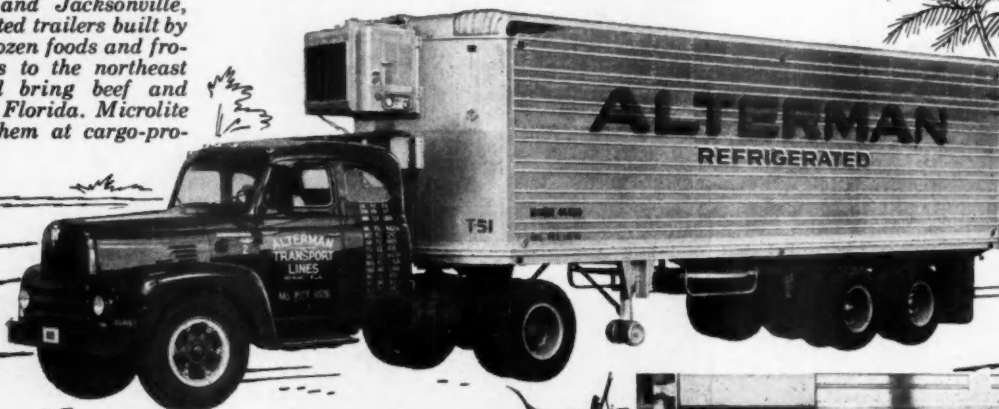
Microlite Insulation

Keeps 'Em at ZERO



ALTERMAN FLEET OF GREAT  DANE REFRIGERATED TRAILERS ARE TEMPERATURE-CONTROLLED BY MICROLITE GLASS FIBER INSULATION

Dispatched from terminals in Miami, Tampa, Orlando and Jacksonville, Alterman refrigerated trailers built by Great Dane haul frozen foods and frozen citrus products to the northeast and midwest, and bring beef and other foods back to Florida. Microlite insulation keeps them at cargo-protecting zero.



Microlite glass fiber insulation is being used exclusively in famous Great Dane Refrigerated Trailers for two very good reasons:

1. Great Dane Refrigerated Trailers are temperature-controlled. Even under the most extreme conditions a Great Dane will hold a constant selected temperature. That calls for a highly effective, completely dependable insulation. That's why the Great Dane people chose Microlite. Half pound density has a "k" value of .26 at 75° F. One pound .21 at 75° F. And once installed it is permanent, won't shake down. Reason: Microlite is over 90% air, less than 10% glass. Millions of tiny air pockets not only give it great insulation efficiency but also great resiliency with resulting high resistance to settling.

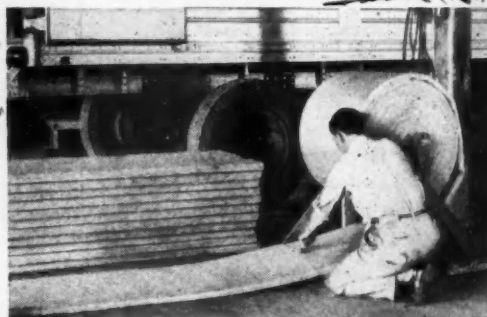
2. Great Dane Cargo Freezers are the lightest weight zero-temperature trailers built. That's another reason why the Great Dane people chose Microlite. To give you an idea of how light it is: 24 square feet of one and one-half inch, half pound density Microlite weigh only 24 ounces. No excess baggage there. Furthermore, Microlite is soft and non-itching, easily cut to shape, readily handled and installed by one man. In short, a great insulation for a great trailer—the Great Dane.

If you are a trailer manufacturer or a fleet owner you should certainly have a sample of Microlite and our informative folder. Write to: L·O·F Glass Fibers Company, Dept. 34-65, 1810 Madison Ave., Toledo 1, Ohio.



L·O·F GLASS FIBERS COMPANY
Toledo 1, Ohio

Makers of glass fibers by the exclusive "Electronic-Extrusion" process



▲ It's an easy, one-man task to cut required lengths from Microlite rolls.

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▼ Goes in fast without clips or adhesives.



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"We decide
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COMMERCIAL

June News Roundup

Continued from Page 231

... L. P. Burroughs, promoted to southeastern regional sales manager (Atlanta, Ga.), Willard Storage Battery Co., Cleveland, Ohio.

... Philip L. Gore, elected president, Security Storage Co., Washington, D. C.

... Peter D. Sarra, president of Rand Express Lines, elected president, Common Carrier Conference, Irregular Route, American Trucking Assns.



Fleets awarding their outstanding, safe drivers recently include:

Portland-Seattle Auto Freight, Seattle, Wash.—to 37 drivers. Total record of the group is 149 years, more than 3½ million miles of safe truck driving.

Campbell "66" Express, Springfield, Ill.—to 300 drivers. Awards were for 1954's total of over 17 million miles with only one accident for each six times around the world.

Linden Motor Freight, Linden, N. J.—to 18 drivers. Fourteen of the drivers have safe truck driving records of five years or better.

Eastern Motor Express, Terre Haute, Ind.—to 82 Bedford, Pa., control station drivers. At the award
(TURN TO PAGE 235, PLEASE)



"We decided to make parking more attractive!"

COMMERCIAL CAR JOURNAL, June, 1955

new



Hendrickson BD-240(S) Tractor with Cummins 175 h.p. Turbodiesel

Here's Hendrickson's short-coupled BD-240(S) tractor that gives you 175 Turbodiesel horsepower and lets you haul a 35-foot trailer and still keep within 45-foot overall length.

Powered by Cummins new 175 h.p. JT-6 Turbodiesel, this Hendrickson tractor can give you fuel savings of from two to three cents a mile compared to gasoline-powered tractors. You get all the advantages of diesel power plus bigger-than-ever payloads thanks to the 800-pound decrease in engine weight over diesels previously used.

For complete specifications, visit your Cummins distributor or Hendrickson Truck representative. And be sure you specify Cummins for your new Hendrickson.

CUMMINS

gives you the big plus

MORE PROFIT

In 1952, 1953, and again in 1954 . . .

Cummins Diesels powered more new trucks than all other makes of diesels combined!

Here's Why
Shelby Motor Express,
Illinois, uses . . .

Dayton Thorobreds



"DAYTON'S GIVE ME LOWER COST PER MILE,"
writes F. Bixler, Pres., Shelby Motor Express, Inc., Shelbyville, Illinois

"A typical example of the wearing quality of Dayton tires is this set on one of our 19 trailers and 14 tractors that haul heavy farm implements and military ordnance. After 5 months of continuous service the wear isn't even measurable on a tire tread depth gauge.

"My drivers swear by Dayton, too, because they're safer and have *never* caused lost time on the road due to blowouts. According to my figures, Daytons give me lower cost per mile than *any* other tire."

Dayton Thorobreds Cut Mileage Costs!

Truckers everywhere are getting more original mileage and more recaps per tire with higher quality Dayton Thorobreds built with stronger, tougher, blowout-resisting carcasses. Choose from a complete line of Dayton Thorobreds. Ask your Dayton Distributor about the "advantages" of specifying longer mileage Dayton Thorobreds as original equipment. Dayton Rubber Co., Tire Div., Dayton 1, Ohio.

GOLDEN JUBILEE

Dayton Rubber

50 YEARS OF PROGRESS

A COMPLETE LINE OF THOROBRED TRUCK AND PASSENGER TIRES



All major brands were tested by Shelby Motor Express for these trailers that haul heavy farm implements and ordnance—never had a blowout with Daytons.



Shelby Motor covers over a million miles per year with its 14 tractors and 19 trailers—most of them on trouble-free Dayton Thorobreds.



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June News Roundup

Continued from Page 233

dinner, Lt. A. H. Shuler, Pennsylvania State Police turnpike detail, paid tribute to the fleet's safety record.

Standard Trucking, Charlotte, N. C.—to 23 drivers. In addition to safety emblems, the drivers received U. S. Savings Bonds totaling over \$1000.

Tamiami Trail Tours, Tampa, Fla.—to 9 drivers. Total time of the group without a chargeable accident is 41 years.

Nickle Plate Motor Freight, Seattle, Wash.—to 14 drivers. The awards, given at a safety breakfast, were for a total of 1½ million miles, 34 years without an accident.

Reliable Cartage Co., Grand Rapids, Mich.—to 93 drivers. Individual records range from 1 to 16 years of accident-free truck driving for a total record of 486 years.

Duff Truck Line, Lima, Ohio—to 34 drivers. Four have records of five years or better.

Catsman Co., Flint, Mich.—to 13 drivers. One driver received a gold pin for his 10-year, over-a-million mile record.

Follmer Trucking Co., Danville, Pa.—to 133 drivers. Safety meetings were held in Harrisburg, Philadelphia, Forty-Fort, Reading and Danville.

Motor Freight Express, York, Pa.—to 11 drivers. Individual records ranged from five to seven years without an accident, and total record for the group was 62 years.

Bend-Portland Truck Service, Portland, Ore.—to 26 drivers. One over-the-road driver has a 24-year no-accident record.

Spector Motor Service, Chicago—to 383 drivers. Six of the drivers have individual records of 10 years or better.

H & H Transportation Lines, Hudson, N. Y.—to 14 drivers. Four drivers have individual records of 5 years or better.

P. B. Mutrie Motor Transportation, Waltham, Mass.—to a team of six drivers. They came out on top in the intra-company 1954 safety contest.

Federal Express, Indianapolis, Ind.—to 139 drivers. The fleet's 1954 accident frequency was 1.56 per 100,000 miles.

(TURN TO PAGE 237, PLEASE)

COMMERCIAL CAR JOURNAL, June, 1955

new



International Cab-Over DCO-200 Series with Cummins 175 h.p. Turbodiesel

Shown here is International Harvester's new DCO-200 series cab-over tractor that gives you 175 Turbodiesel horsepower and lets you haul 35-foot trailers without exceeding 45-foot overall length. International also offers the JT-6 Turbodiesel in other Fort Wayne models in both the 4 and 6 wheel type, as cab-over, 96" space-savers and conventionals and in their West Coast 300 and 400 series tractors.

The compact new Cummins 175 h.p. Turbodiesel in these trucks provides diesel power and economy without extra weight and size. Turbodiesel power advantages are now open to operators who haul short runs . . . log low annual mileages with maintenance comparable to gasoline engines.

For complete specifications, visit your Cummins distributor or International Harvester truck dealer or branch.

CUMMINS

gives you the
big plus

MORE PROFIT

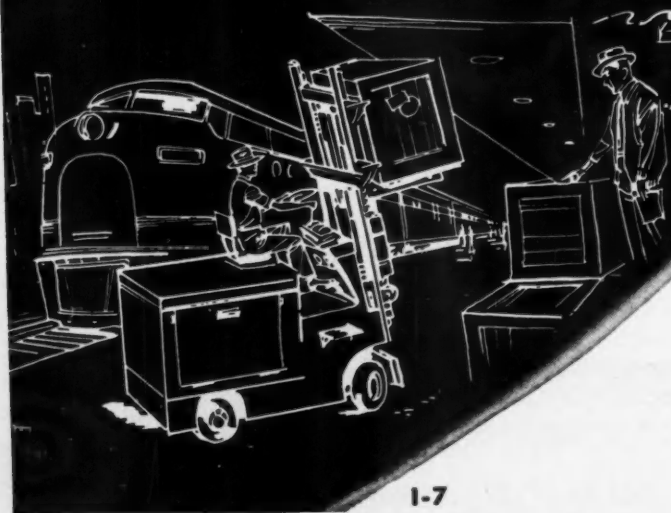
In 1952, 1953, and again in 1954 . . .

Cummins Diesels powered more new trucks than all other makes of diesels combined!

WIRE FOR MOTORIZED TRANSPORTATION EQUIPMENT

Belden

WIREMAKER FOR INDUSTRY
SINCE 1902



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Belden Manufacturing Company • Chicago

COMMERCIAL CAR JOURNAL, June, 1955



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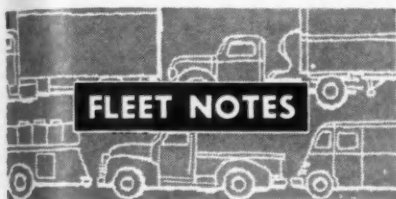


"What cou
carry more

COMMERCIAL

June News Roundup

Continued from Page 235



Pacific Intermountain Express, Oakland, Cal., reports its 1954 safety and insurance cost at 2.77 per cent of gross revenue.

Smith's Transfer, Staunton, Va., has opened a new \$300,000 terminal in Philadelphia, a part of the fleet's \$3 million expansion program.

System Tank Lines, Downey, Cal., has just completed a 1400-ton haul of road oil that included a 50-mile ocean voyage. It took 59 truck-trailer combination loads, carried six at a time in Navy LST's, to carry the oil for a Navy paving job on San Clemente Island.

Spector Motor Service, Chicago opened a new 16-door terminal in Baltimore, Md., last month.

Garrett Freightlines, Pocatello, Idaho, is featured in the May issue of International Trail, a monthly magazine on fleet operations published by International Harvester Co.

Eastern Greyhound Lines, Cleveland, Ohio, is the name adopted first of last month for the operations of four Greyhound properties that are being consolidated into one division. Consolidation includes Central Greyhound, Pennsylvania Greyhound, Capital Greyhound, and Greyhound Lines. (TURN TO PAGE 239, PLEASE)



"What could I do? He legally can carry more in that state!"

COMMERCIAL CAR JOURNAL, June, 1955

new



Kenworth Cab-Beside-Engine Model with Cummins 175 h.p. Turbodiesel

Kenworth's CBE tractor with the lightweight JT-6 Cummins Turbodiesel now gives you 175 diesel horsepower. There's up to 800 pounds less engine weight and you can hitch on a 35-foot trailer and keep within a 45-foot overall length! JT is also available in other Kenworth conventional and cab-over-engine tractors.

The new Cummins 175 h.p. Turbodiesel in these tractors gives you fuel savings no gasoline-powered truck can equal. Equipment price differential can be paid off within a comparatively few months through fuel savings alone! The Cummins PT fuel system makes diesel maintenance simpler than gasoline. Service is available at over 200 service points throughout the United States and Canada.

For complete specifications, visit your Cummins distributor or your Kenworth truck representative.

CUMMINS

gives you the
big plus

MORE PROFIT

In 1952, 1953, and again in 1954 . . .

Cummins Diesels powered more new trucks than all other makes of diesels combined!

On U.S. Route

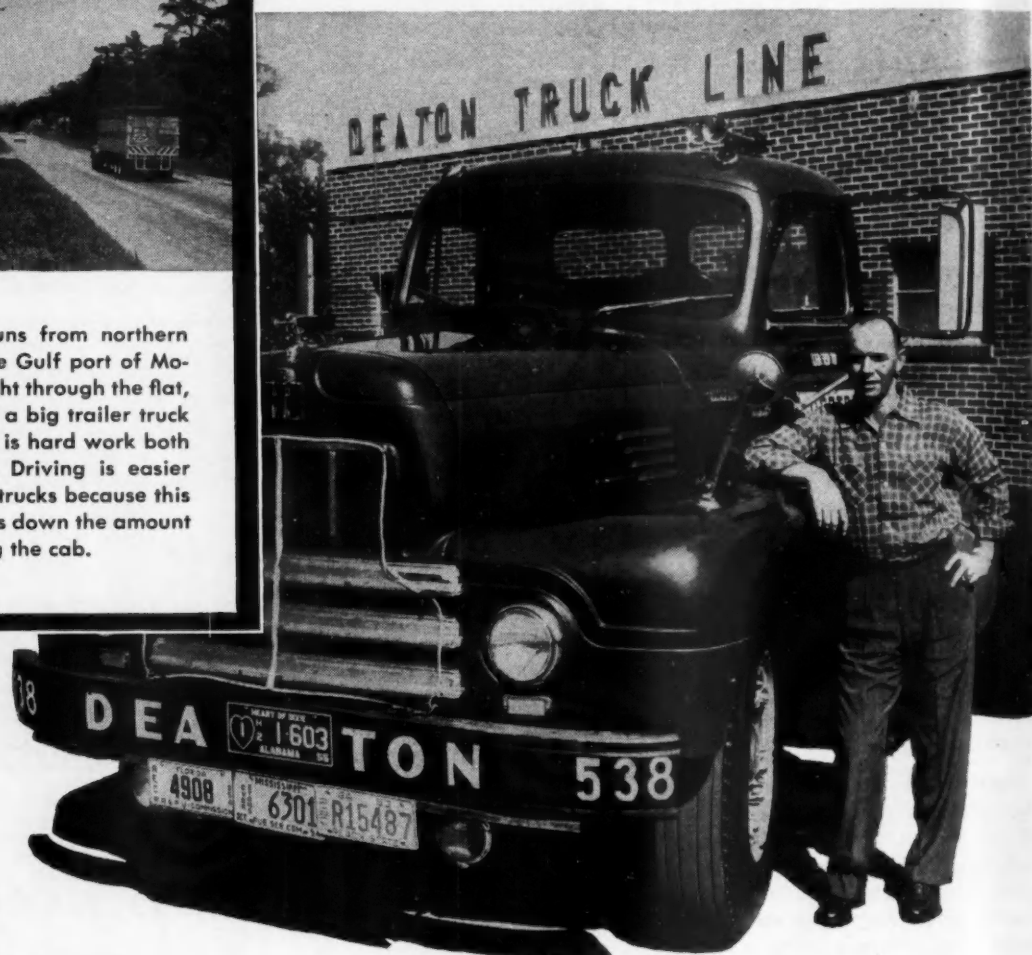


"SOLEX makes driving safer"

says J. H. Allred, Birmingham, Alabama



U. S. Highway 31 runs from northern Michigan down to the Gulf port of Mobile, Alabama—straight through the flat, hot Midwest. Piloting a big trailer truck along this open road is hard work both summer and winter. Driving is easier with Solex-equipped trucks because this green-tinted glass cuts down the amount of solar heat entering the cab.



● John Allred has been driving trucks for 15 years. He averages about 100,000 miles a year for Deaton Truck Line, Inc. of Birmingham. Mr. Allred has put in thousands of miles in cabs equipped with both regular safety glass and Solex® Safety Glass. We asked him how he likes the Solex in his present cab.

"I have nothing but high praise for Solex," says Mr. Allred. "It cuts down

sun glare and keeps my cab cooler. Solex makes driving more comfortable. I don't get so tired, and I drive better."

Comfort and safety are good reasons why it pays to get Solex Safety Glass in your new equipment, and to replace the glass in your present trucks with Solex.

You can get Solex in all the well-known types of Pittsburgh Safety

Glass—Duplate®, Duolite® and Herculite®—as well as in conventional clear glass. For more information write to the Pittsburgh Plate Glass Company, Room 5292, 632 Fort Duquesne Blvd., Pittsburgh 22, Pennsylvania.

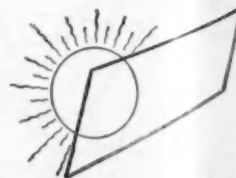
SOLEX "the best glass under the sun!"



PAINTS • GLASS • CHEMICALS • BRUSHES • PLASTICS • FIBER GLASS

PITTSBURGH PLATE GLASS COMPANY

IN CANADA: CANADIAN PITTSBURGH INDUSTRIES LIMITED



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June News Roundup

Continued from Page 237

tol Greyhound and New England Greyhound.

Associated Transport, New York City, has moved into its new \$500,000 terminal in Richmond, Va. It has a 38-door dock, 424-ft underfloor conveyor to pull 35 carts at once. Two-way radio with control dispatching in a 50-mile radius from the terminal.

Esskay Co., Baltimore, was "Grand Trophy Award" winner in Maryland's State Truck Safety Contest sponsored by Trailmobile.

National Trailer Pool, Minneapolis, Minn., is using a new open-top trailer said to save up to 70 per cent in labor time. It has a header bar that splits away from the center of the doors, three longitudinal cables that support the tarpaulin and eliminate ridge poles, and a tarpaulin clamp that can be handled by one loader.

Merchants Motor Freight, St. Paul, Minn., has installed a one-minute wash for trailers at its Chicago terminal. It consists of two 8-ft revolving brushes and eight sprays of water. Driver pushes a button to start the operation, drives through and the machine turns itself off.

Garrett Freightlines, Pocatello, Idaho, has designed an 2480-lb, frameless dolly for use in converting semi-trailers when used as double-bottom rigs. It was designed by Theo Soden, general shop foreman at Pocatello.

(TURN TO PAGE 241, PLEASE)



"A veritable artist when it comes to handling heavy equipment!"

COMMERCIAL CAR JOURNAL, June, 1955

new



White 9022 PLTD Space Saver with Cummins 175 h.p. Turbodiesel

White's new 9022 PLTD space-saver tractor gives you 175 Turbodiesel horsepower and lets you haul 35-foot trailers without exceeding 45-foot overall length. The JT-6 Turbodiesel is also available in White's WC-22 PLTD conventional tractor.

Cummins lightweight 175 h.p. JT Turbodiesel now gives these trucks all the advantages of diesel power . . . does away with excessive engine and chassis weight . . . is the engine that makes over-the-highway operation "right" for diesel.

For complete specifications, visit your Cummins distributor or White Motor Co. representative.

CUMMINS

gives you the
big plus

MORE PROFIT

In 1952, 1953, and again in 1954 . . .

Cummins Diesels powered more new trucks than all other makes of diesels combined!

Mr. Fleet Owner: You provide Door-to-Door Service . . .

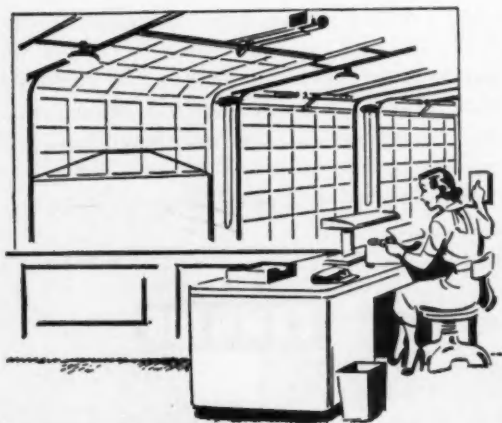
We provide

DOOR SERVICE!

© D. D. C. 1955



Trained serviceman of The "OVERHEAD DOOR" on the job. His know-how, backed by factory instructions, insures prompt correction of any difficulties.



Here's a Tip: Electric operators quickly pay for themselves in man-hours saved. Many fleet operators profit substantially by installing electric operators and remote control.

These Pictures Tell Our Story!

Upward-acting doors have been a must with fleet truck operators ever since Overhead Door Corporation pioneered this space-saving, time-saving door in 1921. For 34 years we have consistently led the field in developing more dependable doors.

Our trade mark symbolizes the finest in weather-tight, tamper-proof, smooth-operating doors—and the best in service. Every distributor of The "OVERHEAD DOOR" has a flying squad of trouble-shooters—and damaged trucking doors have top priority!

Whenever *your* service requires *our* service, see your local distributor or write for details to:

OVERHEAD DOOR CORPORATION

Dept. CC-6, Hartford City, Indiana

THE



Manufacturing Divisions

HILLSIDE, N.J.

NASHUA, N.H.

OKLAHOMA CITY

PORTLAND, ORE.

CORTLAND, N.Y.

LEWISTOWN, PA.

DALLAS, TEX.

NATION-WIDE Sales



Installation

SERVICE

COMMERCIAL CAR JOURNAL, June, 1955

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June News Roundup

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Transamerican Freight Lines, Detroit, has received ICC approval of its purchase of the interstate operating rights of **Allen Motor Lines**, Waterbury, Conn.

Chase Brass & Copper Co., Hartford, Conn., reports that its Waterbury-based fleet had a NO-accident record for 1954. It piled up 420,000 truck miles and 78,000 passenger car miles in the year.

Pacific Intermountain Express, Oakland, Cal., reports that its public relations film, "Wheels of Progress," has been seen by over three million people since it was released in Sept., 1952. Eighty-two prints of the film are in circulation with showings averaging a total of 50 a month.

Denver-Chicago Trucking, Denver, Colo., has added 60 Kenworth Model No. 522 cab-beside-engine trucks to its fleet.



Reo Motors and Monarch Governor Co. have received contracts from U. S. Army Ordnance in Detroit. Reo's contract calls for \$3.221 million worth of new trucks and \$943,300 worth of replacement parts. Monarch's contract is for ammunition components, and is valued at \$1.081 million.

Thompson Products, Inc., plans construction of a new chassis parts plant just north of Detroit for \$6 million, purchase of a former White Motor Co. plant in Cleveland for \$3 million and improvement of other Thompson plans at \$2 million.

Midland Steel Products Co., Detroit, is erecting a new 200,000-sq ft plant in Owosso, Mich., for production of vehicle brakes.

Kenworth Motor Truck Corp., Seattle, Wash., has obtained a \$300,000 credit line from Export-Import Bank, Washington, D. C., to assist it in expanding its foreign markets.

Reo Motors has extended the warranty on its 6- and 8-cyl "Gold Comet" engines to 100,000 miles or one year, whichever occurs first. The new warranty covers the engine only, balance

(TURN TO NEXT PAGE, PLEASE)

new



White-Freightliner Space Maker with Cummins 175 h.p. Turbodiesel

Here's the White-Freightliner Space Maker (with sleeper cab) that gives you 175 diesel horsepower and lets you haul 35-foot trailers and keep within a 45-foot overall length!

Powered by Cummins new 175 h.p. JT-6 Turbodiesel, this White-Freightliner tractor can give you fuel savings of from two to three cents a mile compared to gasoline-powered tractors. Here are all the advantages of diesel power—fast acceleration, faster schedules—plus bigger payloads thanks to an 800 pound decrease in engine weight over diesels previously used!

For complete specifications, visit your Cummins distributor or White-Freightliner Truck representative.

CUMMINS

gives you the
big plus

MORE PROFIT

In 1952, 1953, and again in 1954 . . .

Cummins Diesels powered more new trucks than all other makes of diesels combined!

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SERVICE

L, June, 1955

COMMERCIAL CAR JOURNAL, June, 1955

June News Roundup

Continued from Page 241

of the vehicle carrying the previous standard warranty. Accessories are excluded, as are engines repaired or altered outside the Reo plant.

Electric Auto-Lite Co., Toledo, Ohio, has announced a \$1,200,000 expansion program at its Port Huron, Mich., and Hazleton, Pa., plants.

Aircraft Division, Ledkote Products

Co., Long Island City, N. Y., is now producing contoured stampings for bus and trailer bodies and automotive assemblies using aircraft fabricating methods.

Dura-Bond Engine Parts Co., announces that Motors Parts Warehouse, Columbus, Ohio, is now warehouse distributor for its line of camshaft bearings and cylinder sleeves covering Ohio and West Virginia.

Fruehauf Trailer Co., Detroit, has purchased a 256,000-sq ft factory at Drayton Plains, Mich., is planning to

add space to its Avon Lake, Ohio, plant. Other expansion includes purchase of a 100,000-sq ft plant at Delphos, Ohio, and additions to its Fort Wayne, Ind., plant.

Cummins Engine Co., Columbus, Ind., has named the newly-formed Cummins Carolina Diesel, Inc., as its distributor for South Carolina and southwestern North Carolina. Headquarters will be in Charlotte, N. C.

The Heil Co., Milwaukee, Wis., has appointed Capitol Trailer and Equipment Co., Montgomery, Ala., its distributor in southern Alabama for Heil hydraulic hoists and dump bodies, "Colectomatic" and "Colecto-Pak" garbage bodies, and Heil loader elevating tail gates.

Trailmobile, Inc., Cincinnati, Ohio, has purchased a 170,000 sq ft plant at Long View, Texas. Purchase was made on sealed bid to RFC at a cost of about \$1.5 million. Production at the new facility will include CID, flat and cattle rack trailers.

American Brake Shoe Co., New York City, announces that it has taken over the air compressor business of the Defiance, Ohio, plant of the Lynch Corp.

Globe Hoist Co., Philadelphia, has opened a new plant and sales office in Long Beach, Cal., known as Globe Pacific Hoist Co.

Herman Body Co., St. Louis, Mo., has appointed Ateco Equipment Co., Pittsburgh, Pa.; Commercial Truck Equipment Co., Saginaw, Mich.; Dealers Truckstell Sales, Memphis, Tenn.; Langlois Brothers, Los Angeles, Cal.; Miller Sales, Inc., Bradenton, Fla.; Snyder Body Works, Greenmount, Md.; Robert P. Stapp, Inc., Birmingham, Ala.; and Twin States Equip-
(TURN TO PAGE 244, PLEASE)

Precious Metal In A Battery?



Silvium®, the patented grid alloy in Exide ULTRA START® Batteries, is a precious metal. Not to your jeweler, perhaps, but most certainly to you . . . because it prolongs battery life and slashes battery costs-per-mile!

Silvium combats the two deadliest battery killers, overcharging and sulphation—makes ULTRA START Batteries stay healthier, last much longer, deliver dependable power . . . both in high mileage and stop-and-go driving.

Silvium will cut your battery costs. Equip your fleet now with Exide ULTRA START Batteries!



Write for free copy
of the new catalog 20-3
"Exide Heavy Duty Batteries"

Exide

AUTOMOTIVE DIVISION
P.O. Box 8109 • Philadelphia 1, Pa.



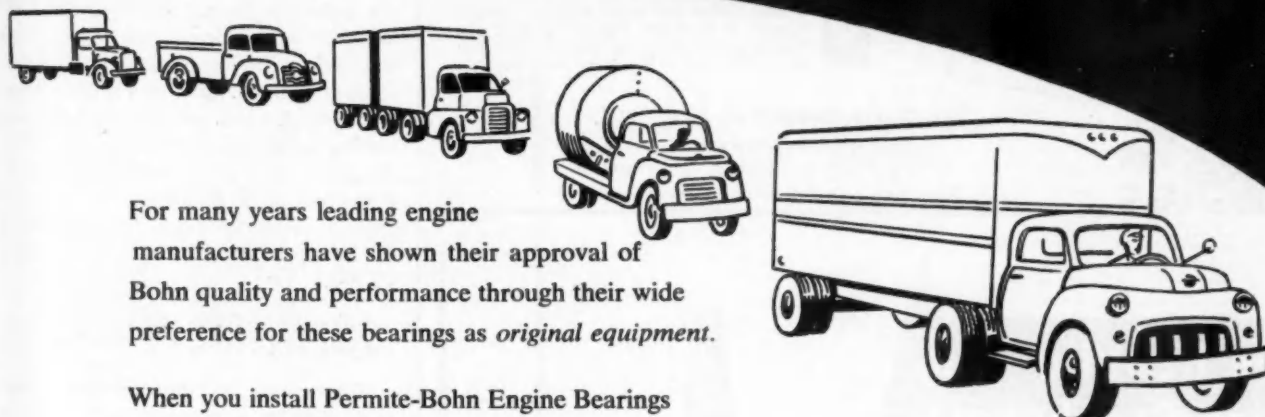
"It's been this way ever since the brakes gave out going down that 30 per cent grade!"



PERFORMANCE APPROVED!

PERMITE-BOHN

ENGINE BEARINGS



For many years leading engine manufacturers have shown their approval of Bohn quality and performance through their wide preference for these bearings as *original equipment*.

When you install Permite-Bohn Engine Bearings you are using the same top quality bearings that have won overwhelming approval as *original equipment*.

For heavy duty service, the Permite-Bohn line features aviation type copper alloy bearings with lead-tin overlay. To keep your fleet rolling, with more money-making hours on the road, and less money-losing hours in the shop, always install Permite-Bohn Bearings.

You can count on prompt service from your nearby Permite Distributor. Give him a call.

ALUMINUM INDUSTRIES, Inc., Cincinnati 25, Ohio



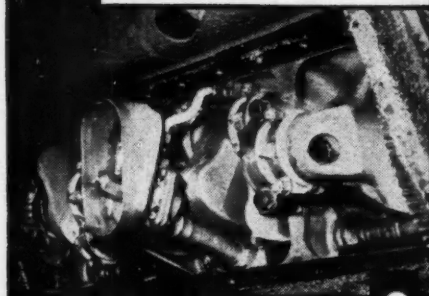
original equipment

Permite parts

the complete motor and chassis line

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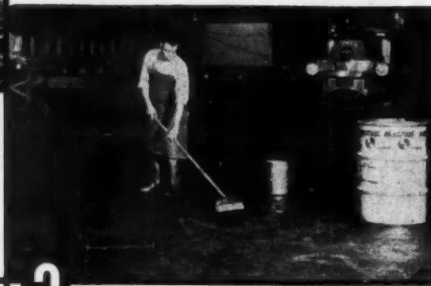
MONEY-SAVING OPPORTUNITIES IN YOUR SHOP



2 **DESLEDDING WITHOUT DISMANTLING** with Magnus 755 saves the time and labor you customarily spend on dismantling engines for cleaning. This photo of engine with pan dropped shows thoroughness of cleaning with 755.



1 **PARTS CLEANING** with Magnus 755 in the Magnus Aja-Dip Cleaning Machine gives you really clean parts with virtual elimination of all hand work. Magnus 755 alone in still tanks is vastly superior to ordinary cleaning materials.



3 **FLOOR CLEANING** with Magnus Cement Cleaner or Magnusol (for very greasy, oily floors) will give you clean floors with minimum effort and at the lowest possible cost.

ASK US
FOR DETAILS
AND
LITERATURE



MAGNUS CHEMICAL CO., INC.

38 South Ave., Garwood, N. J.

In Canada: Magnus Chemicals, Ltd., Montreal
Service Representatives in Principal Cities

We Rebuild *Any* Size Crankshaft *Good As* Better Than New

Our "ARCWELL" process not only rebuilds worn crankshafts to exact factory specifications, but actually provides harder and longer-lasting journal surfaces than are supplied on new crankshafts. The new metal actually becomes part of the parent metal and is guaranteed never to flake off or loosen.

"ARCWELL" service costs considerably less than a replacement and will give better service. Send us a worn crankshaft or write for full information. Prompt service and satisfaction guaranteed.

Standard Crankshaft & Hydraulic Co., Inc.

2917 Roxelle Ferry Rd., Charlotte, N.C.,

Phone: FR 6-2374-5-3469



*Trade Name

June News Roundup

Continued from Page 242

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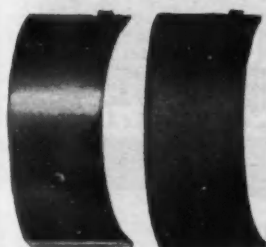
Iowa—Gas tax has been increased
(TURN TO PAGE 246, PLEASE)



"Listen, Mac, I aint asking your help. All I'm asking is that you stop saying 'easy does it'!"



"Gosh, Pee Wee...you've sure got a complete line!"



Conventional bearing.

Thompson "CL-77"[®] heavy-duty bearing. The "Ugly Duckling Bearing" that is running up sensational mileage records.



Thompson's complete line of Engine Bearings include Thin-Layer (tin or lead base) bimetal; conventional babbitt (tin or lead base) bimetal, steel back; copper-lead bimetal, steel back; "CL-77"[®] heavy-duty tri-metal (tin-lead, nickel and copper-lead base) steel back.

STOCK UP WITH TP'S COMPLETE BEARING LINE!

YOUR Thompson Jobber's catalogs contain *thousands* of bearing listings for replacement in trucks, buses, cars and tractors. These are *exact duplicates* of those selected over all others by automotive manufacturers as *original equipment*!

The durability, long life and trouble-free performance of Thompson bearings are engineering accomplishments which not only save money for the owner of the engine ... but also make profits and contented cus-

tomers for the experienced repairman who installs them.

When you need bearings . . . see your Thompson Jobber.



See your
**Thompson
Products Jobber**

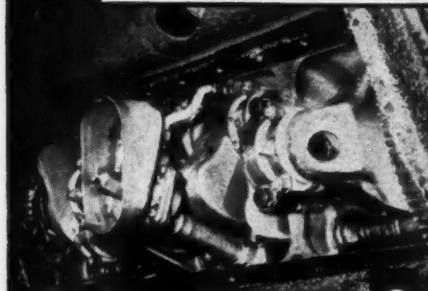
THOMPSON SERVICE SALES
2209 Ashland Road • Cleveland 3, Ohio

[®]Trademark of Clevite Corp.

COMMERCIAL CAR JOURNAL, June, 1955

3

MONEY- SAVING OPPORTUNITIES IN YOUR SHOP



DESLOGGING WITHOUT DISMANTLING with Magnus 755 saves the time and labor you customarily spend on dismantling engines for cleaning. This photo of engine with pan dropped shows thoroughness of cleaning with 755.

2



PARTS CLEANING with Magnus 755 in the Magnus Aja-Dip Cleaning Machine gives you really clean parts with virtual elimination of all hand work. Magnus 755 alone in still tanks is vastly superior to ordinary cleaning materials.



3

FLOOR CLEANING with Magnus Cement Cleaner or Magnusol (for very greasy, oily floors) will give you clean floors with minimum effort and at the lowest possible cost.

ASK US
FOR DETAILS
AND
LITERATURE



MAGNUS CHEMICAL CO., INC.

38 South Ave., Garwood, N. J.

In Canada: Magnus Chemicals, Ltd., Montreal
Service Representatives in Principal Cities

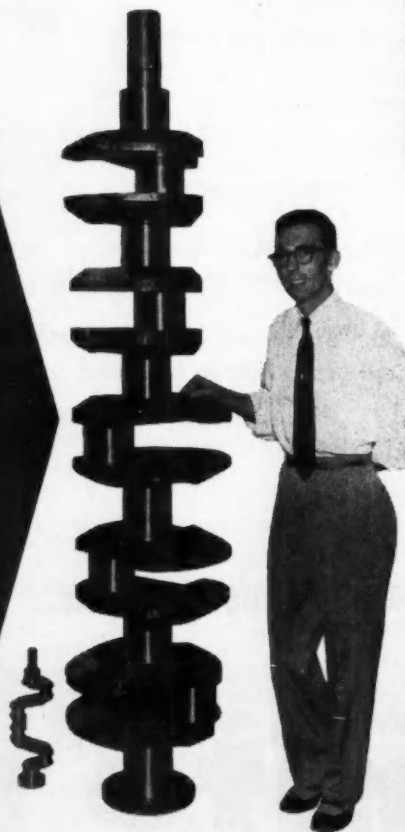
We Rebuild *Any* Size Crankshaft ~~Good As~~ Better Than New

Our "ARCWELL" process not only rebuilds worn crankshafts to exact factory specifications, but actually provides harder and longer-lasting journal surfaces than are supplied on new crankshafts. The new metal actually becomes part of the parent metal and is guaranteed never to flake off or loosen.

"ARCWELL" service costs considerably less than a replacement and will give better service. Send us a worn crankshaft or write for full information. Prompt service and satisfaction guaranteed.

**Standard Crankshaft
& Hydraulic Co., Inc.**

2917 Rozzelle Ferry Rd., Charlotte, N.C.,
Phone: FR 6-2374-5-3469



* Trade Name

June News Roundup

Continued from Page 242

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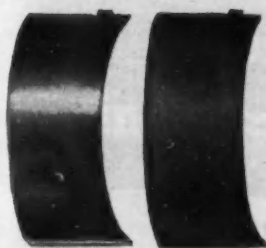
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When you need bearings... see your Thompson Jobber.



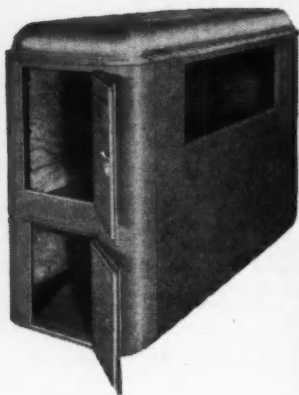
See your
**Thompson
Products Jobber**

THOMPSON SERVICE SALES
2209 Ashland Road • Cleveland 3, Ohio

¹Trademark of Clevite Corp.

COMMERCIAL CAR JOURNAL, June, 1955

THE SLEEPER CAB *Preferred By* DRIVERS & OWNERS



Your payloads move
faster and safer
when your drivers are
refreshed. Non-draft,
roomy TimpTE Sleeper
Cabs always provide
sound, restful sleep
for drivers...
more profit for you!

Outstanding Features

- One-piece welded top insulated
- Extra roominess
- No-draft ventilators
- Two doors each side
- Internal safety locks
- Readily adapted to any truck chassis



TIMPTE BROS., Inc.

40th & York Streets
Denver 5, Colorado

FREE

TIMPTE BROS., Inc.

40th & York Streets
Denver 5, Colorado

Please send me your literature on
the Sleeper Cab

Name _____

Address _____

City _____ State _____

June News Roundup

Continued from Page 244

to 6¢ per gal and diesel tax to 7¢ per gal effective July 1, 1955 (H146). Auto transporters are permitted a 2-ft length tolerance by Highway Commission but may not carry more than 4 cars if they carried only 4 prior to Jan. 3, 1955 (H445). Laws making provisions on motor fuel in excess of 20 gal imported into the state in vehicle fuel tanks have been amended (H540).

Kentucky—Special gross weight limit of 56,800 lb permitted during the recent L&N Railroad strike has been terminated.

Maine—Truck-trailers are required to have rear wheel splash guards (H1224). Hauler of wood from woodlot or forest area may operate 100 miles without certification (H952). Non-resident semi-trailers in intrastate commerce may operate in state without registration if drawn by Maine-registered tractor (S280). Contract carrier definition has been amended (S522). Name of owner or lessee must be displayed on truck-trailers (H972).

Maryland—Interstate operators holding ICC permits or certificates may file affidavit as evidence of liability insurance coverage (S290). Registration fees for semi-trailers operated in relay or shuttle service have been amended (S994). New registration fees for auto transporters have been prescribed (S295). Vehicles loaded with hay or straw in bound bales are permitted a height of 13½ ft (H564). Axle weight limits have

(TURN TO PAGE 248, PLEASE)



"I see you're using a 'hot spray' process to paint your trucks!"

FOR SUPERIOR RESISTANCE to ABRASION and CORROSION

Specify
STRATOFLEX
FLEXIBLE
HOSE No. 225

Built to give long service where conditions are especially rough on hose lines. Reinforced with high tensile strength wire braid with outer cover of tough synthetic rubber. In bulk hose or Hose Assemblies with Stratoflex "over the cover" detachable, re-usable fittings. Write for your FREE catalog or order through your dealer.

★ **Hose Assemblies**

★ **Re-usable Hose Fittings**

Dealership Available
in Some Areas

STRATOFLEX

STRATOFLEX, Inc. FORT WORTH, TEXAS
P. O. Box 10398

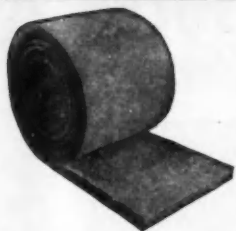
General Offices—P. O. Box 10398
Fort Worth, Texas

Branch Plants—Los Angeles and Toronto
Sales Offices—Atlanta, Chicago, Dayton,
Houston, Kansas City, Los Angeles, Portland,
New York, Toronto, Tulsa

COMMERCIAL CAR JOURNAL, June, 1955



Are SAG-and-SETTLES ruining the insulation in your trucks and trailers?



Could be. These gremlins thrive on ordinary insulations — even better than termites thrive on an untreated two-by-four. Each day, each week, they bore a little deeper until the insulation settles . . . sags . . . packs down . . . disintegrates. Soon, what's left is really not insulation at all — as many a spoiled cargo would indicate.

Luckily, there's one sure way to keep Sag-and-Settles out of your trucks and trailers forever — insulate with ULTRALITE*, the only long textile-type glass fiber insulation. ULTRALITE and only ULTRALITE has been in successful truck-trailer service for 10 years — and

not once has it settled, sagged or otherwise deteriorated. Our files are full of reports that ULTRALITE is "good-as-new" — after 300,000 miles . . . 400,000 miles . . . 500,000 miles.

For instance, The Orscheln Trucking Company of Kansas City: they examined ULTRALITE in one of their units after 5 years of service, and found it absolutely the same as when ULTRALITE was installed in 1947. Still is, they tell us — and the unit has now been in daily service for 8 years and traveled well over 400,000 miles. So if you want "long-haul performance" — at no extra cost — ULTRALITE is the insulation for you. Write today for samples and new 8-page brochure.

ULTRALITE is stocked locally in 57 cities. Your nearby distributor is listed in the Yellow Pages under "Gustin-Bacon Insulations."

*Reg. U. S. Pat. Off.

GUSTIN-BACON

Manufacturing Company

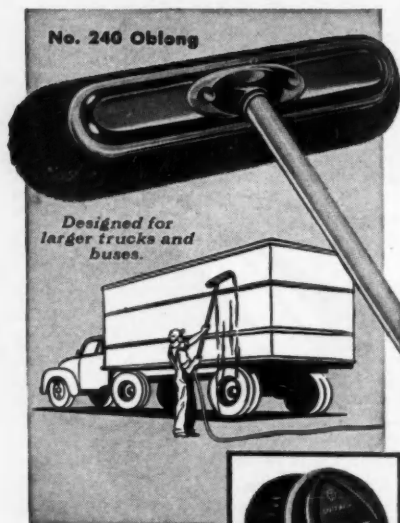


230 W. 10th St., Kansas City, Mo.

Thermal and acoustical glass fiber insulations • Pipe couplings and fittings • Railroad gaskets and supplies

COMMERCIAL CAR JOURNAL, June, 1955

SPEED WASH Outlasts 3 Ordinary Fountain Brushes



NOT even three ordinary fountain brushes can match the long lasting performance that results from the superior construction and design of Speed Wash. Soft, resilient bristles (50% Nylon, 50% Select Horsehair) can't mat or tangle. Tufts are molded into block, can not come out or come loose. Steel back is waterproof and surrounded by a mar-proof bumper. Handle is zinc plated inside and out. Features like these make Speed Wash the quality brush of the trucking industry, preferred by thousands of the nation's biggest fleet operators. You'll like Speed Wash, too. Order yours today.

	PRICES EITHER STYLE			
	IN LOTS OF:			
Complete with 5 ft. handle	1	6	12	24
	\$12.45	\$11.65	\$10.90	\$10.15

MILWAUKEE DUSTLESS BRUSH CO.
530 North 22nd St., Milwaukee, Wis.

Please ship the following:

Quan.	No.	Item	Price
	240	OBLONG SPEEDWASH	
	250	ROUND SPEEDWASH	

NAME _____

ADDRESS _____

CITY _____

STATE _____

June News Roundup

Continued from Page 246

been restated in terms of combined weight on tandem axles (S348). Liability insurance coverage is required for trailers and semi-trailers rented to others (S291).

Minnesota—Tax on urban trucks has been increased 5 per cent (H1513). New trucks and trailers after July 1, 1955, are required to have rigid rear safeguards when rear platform or tailboard is 20 in. or more from ground. Exempted are public utility cable trailers, pole trucks, dump trucks, farm trucks and trucks and semi-trailers hauling unfinished forest products (S407). Maximum speed limit is set at 65 mph (S10). Rough lumber and railroad ties may be hauled in farm trucks exempt from carrier regulations (H325). Tank trailers not over 8500 lb gross weight are exempt from brake requirements if used solely for liquid fertilizer transport and hauled by truck meeting brake requirements (S1077).

Missouri—New type sealed-beam headlamps are approved (H341).

Nebraska—Trucks and semi-trailers

are required to have splash guards (LB492).

New Hampshire—Binder chains are required on vehicles carrying pulp wood (H102). Financial responsibility requirements are increased to \$10,20/5000 (H224). All vehicles including trailers and semi-trailers are required to have approved-type splash guards or mud flaps on rear wheels (H243). A bill has been passed relating to regulation of foreign corporations operating vehicles in intra-state commerce (H196).

New Jersey—N. J. Turnpike Authority has asked bus and truck fleets to adjust schedules so as to reduce speed to 35 mph through restricted two-lane areas where widening to six lanes is taking place. Warning signs and other protective devices will be posted for such areas.

New Mexico—Lighting rules have been extended to all types of trailers (H345).

New York—N. Y. Thruway Authority has issued notice to charge account truck fleets that volume discounts are available. There is no discount on the first \$500 due, on the next \$1000 due a charge account customer gets 5 per cent off, on the (TURN TO PAGE 251, PLEASE)

HUNTER CARGO COOLER

CONTROLLED DRY ICE REFRIGERATION SYSTEMS

LIGHT-WEIGHT, LOW-COST, DEPENDABLE REFRIGERATION

- Bigger payloads — weighs only 375 lbs. — compact, 19 in. x 48 in. x 75 in.
- Low cost — less initial investment — low operating costs.
- Minimum maintenance — greatly reduces upkeep and repair costs.
- Quick turn-arounds — no downtime for servicing — quickly re-iced.
- Makes total road failure of refrigeration an impossibility.
- Complete thermostatic control — temperatures from 0° to 60°.
- 3 Models — 600 lbs. and 1050 lbs. dry ice capacity — also combination heater-refrigeration unit.



Write for descriptive literature, specifications, prices.

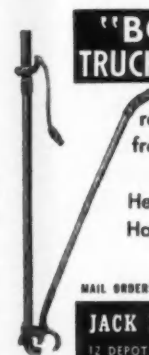


HUNTER MANUFACTURING CO.

1550 E. 17th ST., CLEVELAND 14, OHIO

June News

next \$1000 the and on amount count is 15 p are required license plate vehicle. Other quired to displ Employees of



There a 12 Water in our line

Lasco MOUNT BRAK Americ From Hollywood to A Bus and Heavy Trans for a Few Cents Mor Save Lives! Dealer - A LAKER LASCO BRAKE PI

ZEHR Th

Write ZEHR PR 3129 E. Hazar

June News Roundup

Continued from Page 248

next \$1000 the discount is 10 per cent, and on amounts over \$2500 the discount is 15 per cent. Truck-tractors are required to display the single license plate on the front of the vehicle. Other vehicles are still required to display the plate on the rear. Employees of Truck Weighing Bu-

reau, Public Works Dept., are authorized to stop and weigh vehicles suspected of being overweight (H1190). Vehicles loaded with materials extending four or more feet beyond front of vehicle are required to comply with red flag and red light provisions on end of extending load (H1195). Commercial vehicles operated at night after Jan. 1, 1957, must have approved-type lamps, signaling devices and reflectors (H2761). Compulsory vehicle inspection has been postponed until Dec. 1, 1956. PSC has jurisdiction over household goods transport between New York City and contiguous municipalities and zones adjacent to and commercially part of the city (S1572). Gasoline tax rate is increased to 6¢ per gal (H2887) and diesel fuel tax rate is increased to 9¢ per gal (H2888) effective Jan. 1, 1956, if \$750 million highway bond issue is approved by voters. Regulation of contract carriers of passengers by Public Service Commission is provided for (H1830). Vehicles transporting milk from one plant to another not more than 50 miles apart are exempt from PSC regulation (S3108).

North Carolina—Effective July 1, 1955, a new method has been provided for collection of 7¢ per gal tax on LP gas and liquid fuels other than gasoline (S323). Buses with seven or more seating capacity and trucks or truck-tractors with more than two axles are required to purchase motor fuel in the state for mileage operated in the state or pay state's tax on fuel used in the state but purchased outside. Quarterly reports are required as well as a \$1 annual registration fee (TURN TO PAGE 256, PLEASE)

"BOS" HYDRAULIC TRUCK TIRE DEMOUNTER

removes, safely and easily, frozen or stuck casings from rim in minutes. Features Hein-Werner Hydraulic unit. Handles all size truck tires, wheels, and rims.

MAIL ORDERS OR REQUESTS FOR FURTHER DETAILS TO

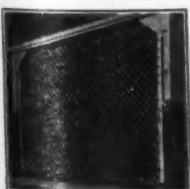
JACK P. HENNESSY SALES CO.

12 DEPOT SQUARE ENGLEWOOD, N.J.

There are now
120
Water Pumps
in
our line
Wohlert
LANSING 5 MICHIGAN

Lasco
SINCE 1908
See this ad in a 1000 places
MOUNTAIN MASTER
BRAKE LINING
America's Finest!
From Hollywood to Manhattan—Demanded by Fine Car, Bus and Heavy Transportation Owners. Get the BEST for a Few Cents More. Cut Costs—Prevent Accidents—Save Lives! Dealer inquiries are invited. Write or wire.
A LAMAR INDUSTRIES PRODUCT
LASCO BRAKE PRODUCTS CORP. MEMPHIS 3, TENN. OAKLAND 7, CALIF.

ZEHR Theft Proof Collapsible Truck Backs



Safe—easy and simple to handle. Zehr Truck Backs are all-welded steel designed for great strength and long continuous service. They are THEFT-PROOF, rust-proof and flexible.

Write for details and prices

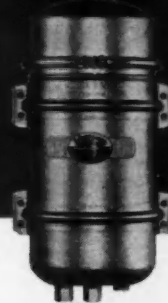
ZEHR PRODUCTS COMPANY
2129 E. Hazard St. Philadelphia 25, Pa.



"You don't give me tickes and I give you shirtee!"

STANDARD OF THE INDUSTRY
SINCE 1936

AND NOW!
EVEN BETTER
THAN
EVER!



Luber-finer
New Revolutionary

Models

500-C
and
750-C



Fully Covered by
issued & pending
U. S. A. and
Foreign Patents

IT'S WHAT'S
INSIDE THAT COUNTS
The efficiency of
Luber-finer's Patented
Process Pack
has never been
equalled!

Save Time and Money with
Luber-finer's FASTER
SIMPLIFIED Pack Replacement

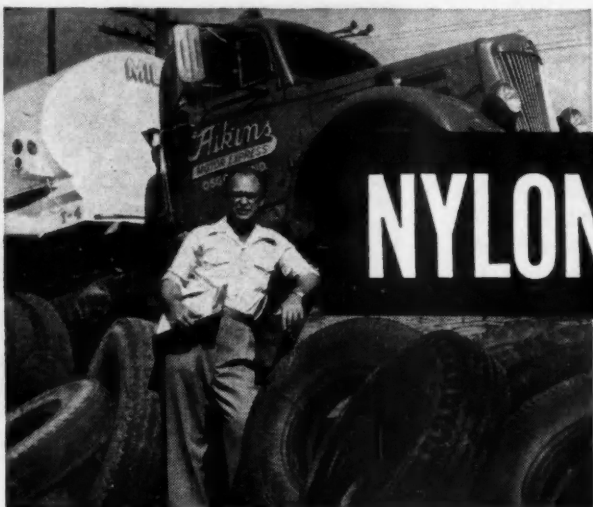
Luber-finer Exclusive Features:

- **Single Bolt Closure**—Ingeniously designed Clamping Ring utilizes Single Bolt Closure for quick, easy Pack Replacement.
- **Positive Sealing Gasket**—Long lasting "O" ring type gasket assures leak-proof lid closure at all operating pressures.
- **New Type Internal Design and Construction**—Provides multiple seal to eliminate the possibility of oil bypassing the Lubefiner pack.
- **Dual Safety Valves**—Prevents oil drainback, assuring exact crank case oil level reading at all times, stops oil from circulating through unit if lines are reversed or if Lubefiner is otherwise improperly installed.
- **One-Piece Extruded Steel Housing**—Plus rugged mounting brackets insures durability and long, trouble-free operation.
- **Time-Tested Patented Filtering Process**—Only in genuine LUBER-FINER PACKS—the exclusive patented filtering process proved by millions of satisfied users.

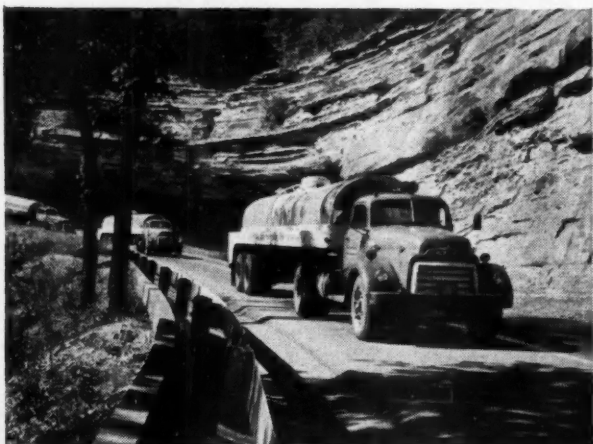
For Complete Information Write Dept. 190

LUBER-FINER, Inc.

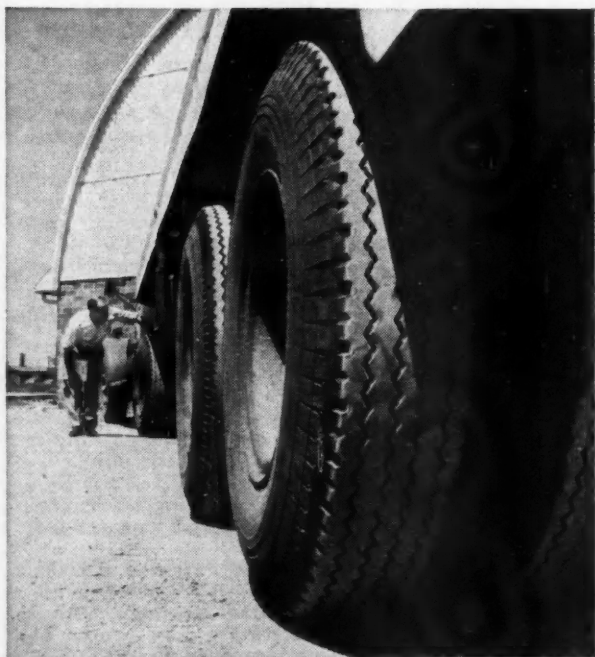
2514 S. Grand Ave., Los Angeles 7



MORE RECAPS. "We've already gotten 2 recaps from our nylon cords and expect more," reports Mr. Aikins. "At 30,000 miles per recap, that goes a long way in cutting costs per mile."



MORE MILEAGE. "Our records show nylon cord tires give over 200,000 miles of service, rolling 24 hours a day, 7 days a week, under loads averaging 24,000 lbs.," continues Mr. Aikins.



FEWER ROAD DELAYS. "Since switching to nylon cord tires, we haven't had one single road delay caused by tire trouble," reports Mr. Aikins. "That's an important advantage in speeding up service and maintaining our schedules."

Prominent midwest trucker finds:

NYLON CORD TRUCK TIRE

DU PONT and leading tire manufacturers worked together for ten years—experimenting, developing, testing—to perfect today's nylon cord tires. Now, truckers' actual experience proves that nylon gives the best protection against tire failure. Nylon cords guard against road delays . . . make possible tires that give longer recap life. Tires made with nylon cord give more mileage . . . lowest cost per mile.

Nylon cords are so tough they practically end cord ruptures when tires hit holes and bumps. Nylon cords are resilient—do not break under the twisting and flexing that take place every time a tire turns. Nylon not only takes the hottest temperatures a tire will ever encounter in normal highway operations, but actually runs 10° to 15° cooler. And damp rot of cord, which was once a major threat to tire life, is a thing of the past with nylon. Even if moisture seeps in through cuts to reach the cords, it doesn't damage nylon.

Prove to yourself that nylon cord tires give substantially lower cost per mile under any road or load condition. Ask your dealer about nylon cord truck tires today. Du Pont makes the tough, long-lasting nylon yarns which are used by rubber companies to make the tires that give the best protection against tire failure.

DU PONT NYLON for TIRE CORD



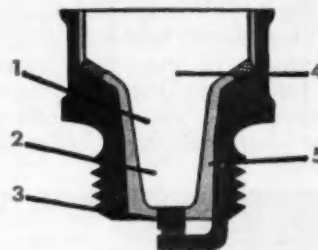
REG. U. S. PAT. OFF.

BETTER THINGS FOR BETTER LIVING...THROUGH CHEMISTRY

YOU'LL FIND NYLON IN PASSENGER-CAR TIRES, TOO!
Shock-absorbing nylon cords mean extra protection against blowouts . . . greater safety on any road.



**PERFORMS BEST FOR
IT'S IGNITION ENGINEERED**



1. **Long Insulator Tip** for longer deposit path.
2. **Thin Insulator Tip** for improved fouling characteristics under extreme conditions.
3. **Heavy Center Electrode** increases service life and maintains proper gap for longer time.
4. **High Grade Insulator** withstands intense heat and high compression of modern truck and bus engines.
5. **Greater Shell Volume** insures maximum resistance to fouling . . . a major cause of poor performance.

*You're always right
with AUTO-LITE*



"Tough driving deserves the backing of spark plugs designed for the toughest kind of service. Auto-Lite Spark Plugs have won that reputation with us, and we have tried them all."

W. V. Carl

MAINTENANCE SUPERINTENDENT
THE MCFARLAND & STAMPLE
TRUCKING COMPANY, INC.

Since 1939—over 16 continuous years—Auto-Lite Transport Spark Plugs have been used exclusively by The McFarland & Stample Trucking Company, Inc. They have proved their superiority in dependability and performance—in reducing costs and raising profits. You can prove for yourself—in your own fleet operation—why ignition engineered Transport Spark Plugs are preferred and used by so many truck and bus fleets. For complete details on Transport Plugs, contact your Auto-Lite Supplier or write

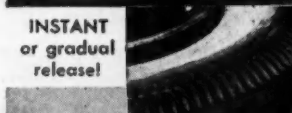
THE ELECTRIC AUTO-LITE COMPANY • Spark Plug Division • TOLEDO 1, OHIO

KEN-SPEED DUAL-PURPOSE BEAD EXPANDER FOR TUBELESS TIRES

Services both auto and truck tires! Every tire repair man needs this powerful, positive, fast-acting tool. Safer, easier to use. Built extra strong for longer life. You can't buy better . . . you can't afford less! For your protection, insist on Ken T-130.



Seats bead with a few Strokes. FAST . . . SAFE!



INSTANT or gradual release!



Powerful enough for Tubeless Truck Tires!

WHY BUY TWO?

Ken-Speed Bead Expander is the only tool with the extra power to service both auto and truck tube less tires.

IF IT'S A KEN, IT'S BETTER

See your automotive jobber

The KEN-TOOL Mfg. Co.
AKRON 5, OHIO

Retail **\$9.90**

HEAVY DUTY MOTOR TRUCKS GASOLINE ELECTRIC GENERATING SETS

DUPLEX

TRUCK COMPANY
LANSING, MICHIGAN

CAMPBELL "TRACTION TWINS"

● KWIK-ON CHAINS

. . . for continuous driving, on the wheel in less than a minute

● TRACTION KLIPS

. . . for emergencies . . . a sure start when you're stuck

CAMPBELL CHAIN COMPANY
YORK, PA. • W. BURLINGTON, IOWA
PORTLAND, ORE. • SACRAMENTO, CALIF.

June News Roundup

Continued from Page 251

per vehicle. It is effective Jan. 1, 1956 (S324).

Oklahoma—New law relates to transport of explosives, flammable liquids or gases (H858).

Oregon—New financial responsibility requires posting of \$5/10/2000 security following an accident and proof of future responsibility for 5 years after the accident in amounts of \$5/10/5000 (S292). Authorizes State Reciprocity Office to negotiate agreements with other states covering motor vehicle taxes (S346).

Pennsylvania—A bill is now in the legislature (H1288) to increase single-axle semi-trailer combination GVW to 50,000 lb, tandem-axle semi-trailer combination to 60,000 lb, and single axle weight limit to 22,400 lb. Proportionate changes are made in other registration classifications. The bill also provides a new schedule of overload fines and increased truck registration fees.

Rhode Island—A special commission will make a complete study and revision of financial responsibility law (S340). All motor vehicles are required to have front fenders and heavy commercial vehicles are required to have mudguards (H719). Auto manufacturers, dealers and transporters are required to prove financial responsibility as condition precedent to vehicle registration (S338). Turn signals are required when distance from top center of steering column is 14 ft to rear limit or 24 in. to left limit of vehicle or load (S337).

(TURN TO PAGE 268, PLEASE)



"You can practice to be a dispatcher without using words like that!"

BOWERS BATTERIES

Always Better

BOWERS BATTERY & SPARK PLUG CO., READING, PA.



COVER 70% OF ALL
MAKES OF TRUCKS
AND BUSES ARE

Zoller EQUIPPED

ZOLLNER
HEAVY DUTY PISTONS

more payload
with
Lintern

LIGHTER WEIGHT
STEP, SADDLE, &
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